DANISH MARITIME AUTHORITY

Marine Accidents

2007

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Explanation of Symbols

-	= Zero
..	= Data not available
…	= Data not yet available
0	= Less than 0.5 of unit employed
0.0	= Less than 0.05 of unit employed
●	= Number can not exist in that context
*	= Provisional or preliminary figure
─	= Break in the homogeneity of vertical series
|	= Break in the homogeneity of horizontal series

Preface

The Danish Maritime Authority's annual statement of accidents at sea concerns accidents and causes of accidents on Danish and foreign ships in Danish territorial waters from 1998 to 2007. The underlying basis of numbers is, because of the size of the business, not very large, and the tendencies are therefore not statistically reliable.

Marine Accidents 2007 is a part of the Danish Maritime Authority's work for preventing accidents at sea. Knowledge of accidents can be used to target the effort both in the maritime businesses and with the authorities in order to continuously improve the safety and reduce the numbers of accidents.

Descriptions in closer detail of the individual accidents can be found in the accident reports respectively the Quarterly Information which the Danish Maritime Authority's Division for Investigation of Marine Accidents publishes. Reports and Marine Accidents reports in English can be found on the Danish Maritime Authority's homepage (www.dma.dk).

The statement in *Marine Accidents 2007* contains only marine and work related accidents that have taken place in the period 1998 to 2007, which the Danish Maritime Authority is familiar with and of which the Authority has concluded the investigation before ***1 March 2008***.

Accidents concerning pleasure boats are registered by the Danish Pleasure Craft Safety Board and not by the Danish Maritime Authority.

All the time periods are computed from similar criteria and include the changes that may be added in the following year, such as corrections. Therefore, the figures in the time periods may vary compared to statements of earlier years.

Essential terms and expressions used in this publication are defined in Annex 2.

Copenhagen, November 2008

Key figures

A selection of the most important key figures in this statement is shown below.

Merchant ships

Includes ships registered in Denmark and Greenland.

Table 1: Marine accidents on board merchant ships

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Marine accidents	71	51	39	48	43	40	34	41	59	41

Table 2: Deaths on board merchant ships

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Fatal causalities	6	11	14	8	7	13	-	3[1)]	1	4
Of these in relation with marine accidents[2)]	2	8	8	2	1	11[3)]	-	-	-	-
Of these in relation with the work on board	4	2	6	2	2	2	-	1	-	3
Of these in relation with other activity, in spare time, etc.	-	-	-	4	4	-	-	1	1	-
Of these unspecified	-	1	-	-	-	-	-	1	-	1

1) Including one death as a consequence of a heat stroke, on board DANICA RED in the Persian Gulf. A classification of the accident was not possible.
2) Of these in relation with marine accidents; meaning that a marine accident was the direct cause of death. No further investigations will be made into the chain of events to determine the cause of the accident.
3) All these deaths can be related to STEVNS POWER that foundered off the coast of Nigeria.

Table 3: Reported work related accidents on board merchant ships

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Work related reportable accidents[1)]	634	570	527	486	412	420	342	288	339	397
Of these serious work related accidents	100	71	83	95	77	72	51	40	58	66
Work related accidents not reportable	276	285	300	281	265	245	210	210	236	247
In total	**910**	**855**	**837**	**767**	**677**	**665**	**552**	**498**	**575**[2)]	**644**

1) Including accidents followed by death.
2) The increase compared to last year's number is due a underreporting to the Danish Maritime Authority.

Fishing vessels

Includes ships registered in Denmark and Greenland.

Table 4: Marine accidents on board fishing vessels

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Marine accidents	21	37	35	42	34	29	39	25	36	27

Table 5: Marine accidents on board fishing vessels

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Deaths	**6**	**7**	**1**	**5**	**4**	**11**	**5**	**3**	**3**	**3**
Of these in relation with marine accidents[1)]	4	5	-	3	1	5	4	-	1	2
Of these in relation with the work on board	1	2	1	2	2	4	1	2	1	1
Of these in relation with other activity, in spare time, etc.	1	-	-	-	1	2	-	1	1	-

1) Of these in relation with marine accidents; meaning that a marine accident was the direct cause of death. No further investigation will be made into the chain of events to determine the cause of the accident.

Table 6: Reports of work related accidents on board fishing vessels

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Work related reportable accidents	193	202	205	215	196	168	123	101	78	81
Of these serious work related accidents	62	55	71	53	53	46	30	27	24	14
Work related accidents not reportable	29	32	36	53	34	30	18	16	11	8
In total	**222**	**234**	**286**	**268**	**230**	**198**	**141**	**117**	**89**	**89**

Reported serious work related accidents on merchant ships and fishing vessels

Table 7: Number of reported serious work related accidents

Serious work related accidents	2002	2003	2004	2005	2006	2007
Fishing vessels	53	46	30	27	24	14
Cargo ships under 3000 BT	36	32	19	17	22	27
Cargo ships over 3000 BT	22	28	19	11	27	31
Passenger ships	19	12	14	12	9	8
Total	**130**	**118**	**82**	**67**	**82**	**80**

Table 8: Frequency of serious work related accidents (accidents per 1,000 crew members)

	2002	2003	2004	2005	2006	2007
Fishing vessels	9.1	8.5	5.9	5.6	5.1	3.0
Merchant ships under 3000 BT	15.2	14.0	9.2	8.0	9.0	9.9
Merchant ships over 3000 BT	6.9	8.5	5.3	2.8	5.9	6.7
Passenger ships	7.2	4.9	5.6	4.9	3.5	2.9
In total	**9.2**	**8.8**	**6.2**	**5.0**	**5.8**	**5.7**

Foreign ships

Table 9: Types of marine accidents on foreign ships in Danish waters

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Grounding	19	26	23	21	22	15	19	23	22	31
Collision[1)]	16	9	15	15	6	9	14	18	12	8
Collision (crash)[1)]	2	2	-	1	1	1	1	-	-	4
Fire	1	2	-	3	3		1	4	3	3
Loss	2	-	-	-	-	2	1	1	1	2
List	1	-	1	1	-	-	-	-	-	-
Water penetration	-	-	-	-	-	1	-	-	-	-
Pollution	-	-	-	2	2	1	3	-	-	-
Accidents in spare time	-	-	-	-	-	-		1	1	-
Contact damage	-	1	-	1	1	1	3	5	2	4

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Leakage / watering	-	-	-	-	-	-	-	-	1	2
Hard weather damage	-	-	-	-	-	-	-	-	-	2
Other		-	-	-	-	-	-	8	1	4
In total	**41**	**40**	**39**	**44**	**35**	**30**	**42**	**60**	**43**	**61**

1) Collision and other collision (crash) indicate the number of registered ships that have been involved in the accident. If the number is odd, it indicates that Danish ships have been involved in the accident and are therefore not accounted for in this table of foreign ships.

Groundings and collisions in Danish waters

Table 10: Frequency of groundings and collisions per 10 000 passages in The Great Belt and Oresund

Groundings and collisions per 10 000 passages		2001	2002	2003	2004	2005	2006	2007
Oresund	Grounding	2.38	1.60	0.77	0.51	0.84	1.38	1.69
	Collision	0.79	0.26	0.77	0.51	0.56	0.28	0.28
The Great Belt	Grounding	0.43	0.48	2.16	3.38	2.88	0.40	0.39
	Collision	1.70	-	0.43	0.42	1.23	0.40	0.39
In total		**2.93**	**1.71**	**1.93**	**2.06**	**2.50**	**1.31**	**1.63**

Marine accidents involving merchant ships

This listing comprises ships registered under Danish or Greenlandic flag.

Table 11: Number of marine accidents

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Marine accidents	71	51	39	48	43	40	34	41	59	41
Of these ships that foundered	6	3	3	2	1	4	1	-	2	-
Of these other serious accidents	9	5	8	6	3	3	6	6	15[1)]	6
Marine accidents per 1.000 ships	**33.1**	**23.7**	**18.0**	**22.7**	**20.2**	**18.6**	**15.3**	**18.3**	**26.7**	**19.5**

1) 3 of the accidents are due to a minor change in the definition of serious maritime accidents by the Danish Maritime Authority in 2006. Find the definition in annex 2.

Table 12: Distribution of accidents on the type of merchant ships with a tonnage of less than 3.000 BT

	Dry cargo ships	Tankers	Passenger ships	Other ships	In total
1998	19	3	13	14	**49**
1999	13	3	13	7	**36**
2000	8	2	7	6	**23**
2001	12	4	8	11	**35**
2002	12	2	12	8	**34**
2003	5	4	10	10	**29**
2004	11	2	4	5	**22**
2005	9	-	10	9	**28**
2006	11	1	11	18	**41**
2007	8	-	9	3	**20**

Table 13: Distribution of accidents on the type of merchant ships with a tonnage of more than 3.000 BT

	Dry cargo ships	Tankers	Passenger ships	Other ships	In total
1998	5	1	15	1	**22**
1999	5	1	8	1	**15**
2000	4	1	11	-	**16**
2001	5	-	6	2	**13**
2002	3	2	4	-	**9**
2003	1	1	9	-	**11**
2004	5	3	4	-	**12**
2005	3	1	9	-	**13**

	Dry cargo ships	Tankers	Passenger ships	Other ships	In total
2006	6	5	7	-	**18**
2007	5	3	13	-	**21**

The average age of the ships involved in marine accidents is shown below. The age of the ships is defined as the year of the accident minus the registered construction year. The table shows that in 2005, 15% of the ships involved in marine accidents were between 11 and 15 years of age

Table 14: The average age of ships involved in a marine accident

Percentage	Less than 5 years	5 – 10 years	11 – 15 years	16 – 20 years	21 – 25 years	More than 25 years	Total	Number of ships
1998	20 %	20 %	11 %	17 %	5 %	25 %	**100 %**	**71**
1999	13 %	19 %	7 %	13 %	9 %	36 %	**100 %**	**51**
2000	20 %	5 %	7 %	23 %	20 %	23 %	**100 %**	**39**
2001	16 %	14 %	4 %	12 %	14 %	38 %	**100 %**	**48**
2002	2 %	6 %	23 %	2 %	18 %	46 %	**100 %**	**43**
2003	5 %	22 %	10 %	15 %	7 %	40 %	**100 %**	**40**
2004	17 %	11 %	20 %	20 %	5 %	23 %	**100 %**	**34**
2005	12 %	15 %	15 %	0 %	22 %	35 %	**100 %**	**41**
2006	15 %	6 %	15 %	6 %	8 %	47 %	**100 %**	**59**
2007	14%	12%	17%	24%	12%	19%	**100%**	**41**
Gns.	14%	13%	12%	13%	11%	34%	**100%**	**46,6**

Types of marine accidents

The different types of marine accidents are specified below.

Table 15: Types of marine accidents

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Fire, accommodation	1	2	3	-	1	-	1	4	1	-	13
Fire, cargo hold / tank	1	-	1	1	-	-	1	-	-	-	4
Fire, engine room	4	3	6	3	6	1	1	4	4	1	33
Fire, in total	6	5	10	4	7	1	3	8	5	1	50
Grounding	18	20	7	14	11	12	6	14	17	10	129
Damage	-	-	2	4	2	6	1	3	2	4	24
Hard weather damage	1	2	1	-	-	2	1	1	-	2	10
Collision	13	5	7	10	6	8	11	4	12	3	79
Contact damage	14	5	8	8	5	5	8	7	12	12	84
Capsizing	3	3	1	1	1	2	-	-	-	-	11
Leakage and watering	1	1	-	1	2	2	1	-	3	-	11
Engine breakdown	2	3	-	1	2	1	-	-	4	5	18
Collision (crash)	7	4	2	4	5	-	3	4	3	3	35
List	2	1	1	-	1	1	-	-	-	-	6
Practice drill accident	-	1	-	-	1	-	-	-		-	2
Other	4	1	-	1	-	-	-	-	1	1	8
In total	**71**	**51**	**39**	**48**	**43**	**40**	**34**	**41**	**59**	**41**	**467**

Please notice that the figures for collision and collision (crash) indicate the number of ships involved in the accidents, and not the number of accidents. If the number is odd, it is due to either the other ship being foreign (number of marine accidents involving foreign ships in Danish waters is shown in table 10), or the other ship is not registered at all, for instance if the accident has taken place in foreign waters

When a marine accident occurs, the Danish Maritime Authority categorizes it in one of the following categories: Loss, serious accident, and less serious accident. The figure below gives a view of the development in the number of accidents in these categories in the past 10 years.

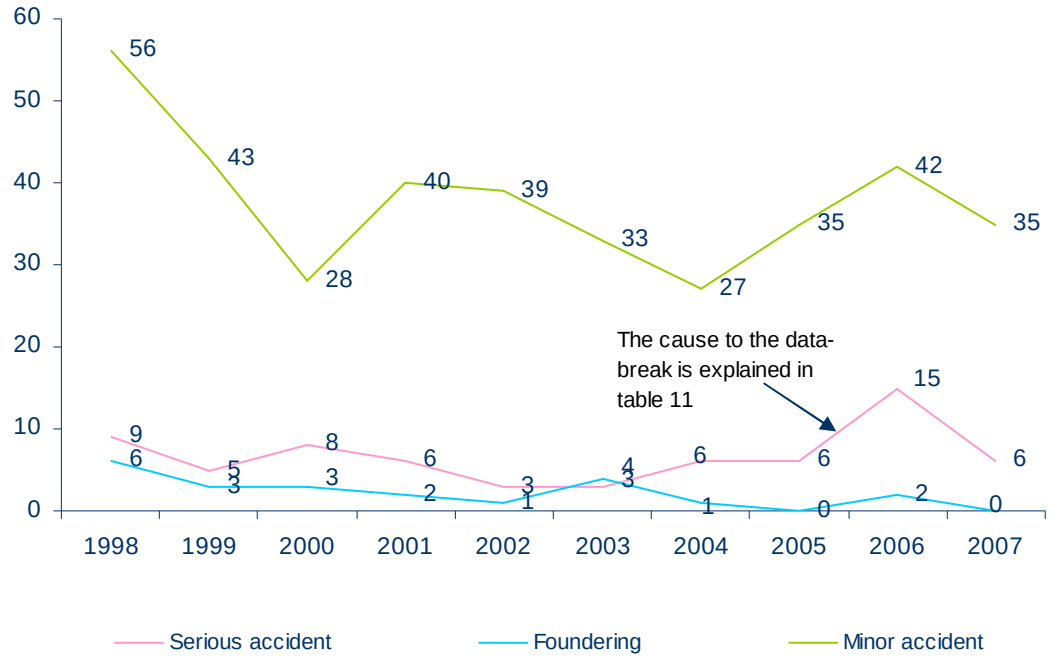

Figure 1: Development in the number of marine accidents distributed by the character of the accident

Causes of marine accidents on merchant ships

An essential part of the work of the Danish Maritime Authority's Division for Investigation of Marine Accidents on examining the marine accidents is to determine the cause of the accident in order to use the obtained knowledge to avoid similar accidents in the future. In 2006 and 2007 the causes of marine accidents were distributed as shown below.

Table 16: Type of ship involved in marine accident, distributed by main cause

	Dry cargo ships		Tankers		Passenger ships		Other ships		In total	
	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
Conditions outside the ship	-	3	1	2	7	5	1	-	9	10
Operational errors	8	6	1	1	8	7	8	4	25	18
Technical defects	5	3	2	-	3	9	4	-	14	12
Unsolved	3	1	2	-	-	-	3	-	8	1
Unspecified	1	-	-	-	-	-	1	-	3	-
In total	**17**	**13**	**6**	**3**	**18**	**21**	**18**	**4**	**59**	**41**

Work related accidents on board merchant ships

In this chapter, the work related accidents in the merchant fleet that have come to the knowledge of the Danish Maritime Authority no later than March 1st 2008, are described. All time sequences are constructed specifically for this statement in order to ensure uniform extraction criteria and to include any late recordings of accidents from previous years.

The actual number of reported work related accidents is likely to be higher, since the Danish Maritime Authority is not informed of all accidents. The listing also shows deaths and personal injuries incurred in marine accidents.

Work related accidents means all accidents incurred in relation to employment at sea which have to be reported to the Danish Maritime Authority – regardless of the cause of the accident. A work related accident could therefore be incurred in connection with a marine accident involving the ships.

Table 17: Received reports on work related accidents

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Reportable work related accidents [1]	634	570	537	486	412	420	342	288	339	397
Of these ships in DAS[2]	256	197	126	85	84	80	77	55	51	55
Passenger ships	191	160	93	57	55	59	55	35	32	34
Cargo ships	65	37	33	28	29	21	22	20	19	21
Of these ships in DIS	378	373	411	401	328	340	265	233	288	342
Passenger ships	79	107	122	96	99	116	75	59	103	108
Cargo ships	299	266	289	305	229	224	190	174	185	232
Not reportable work related accidents	276	285	300	281	265	245	210	210	236	247
Of these ships in DAS[2]	90	64	67	42	33	30	27	43	39	42
Of these ships in DIS	186	221	233	239	232	215	183	167	197	205
Work related accidents in total	**910**	**855**	**837**	**767**	**677**	**665**	**552**	**498**	**575**[3]	**644**

1) Including accidents resulting in death.
2) Including ships registered in Boat Register.
3) Ships under construction and ships, where it has not been possible to determine where the ship was registered at the time of the accident.

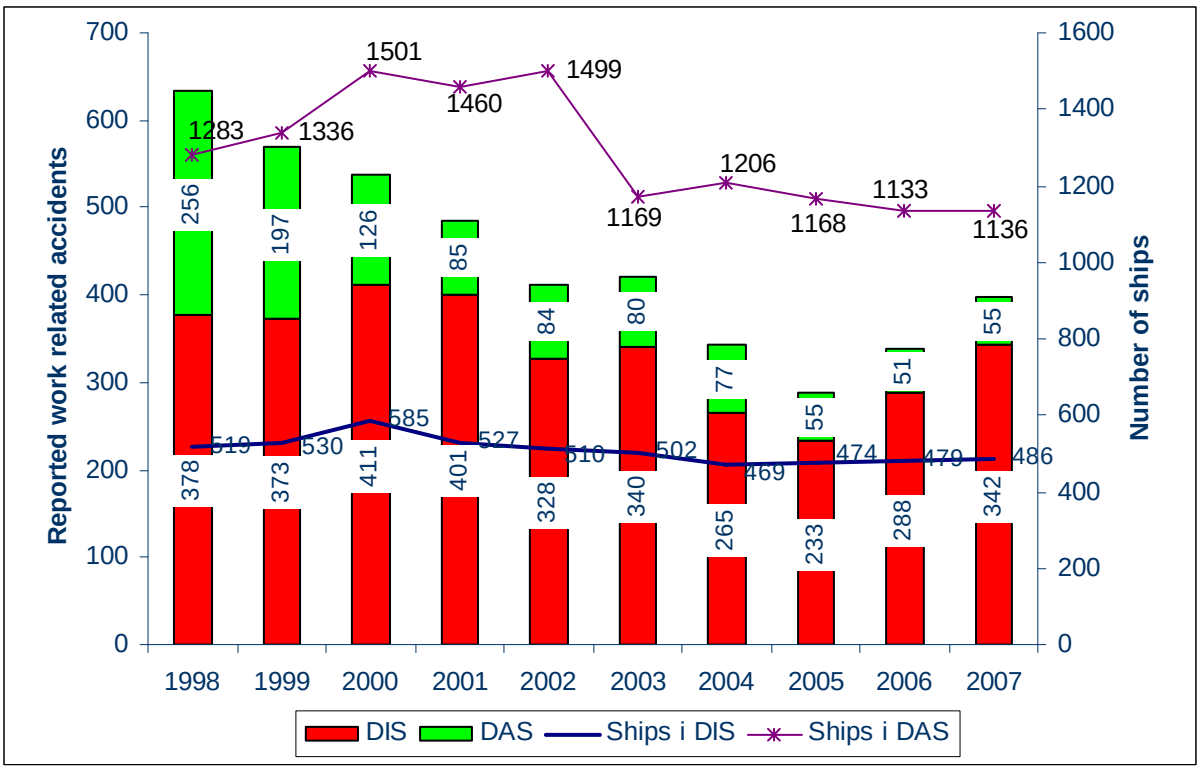

Figure 2: Development in the number of reported reportable work related accidents, and development in ships

In the table below the work related accidents are specified according to the consequence of the accident, and the primary cause of the accident. Often it is a longer chain of events that leads to an accident. However, it would be too comprehensive to consider the overall chains of events here.

Table 18: Reported work related accidents (reportable and not reportable) in the merchant fleet, all nationalities

		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Fatal causalities	At marine accidents[2)]	2	8	8	2	1	11[2)]	-	-	-	-
	Work on board	4	2	6	2	2	2	-	1	-	3
	Other activity, spare time	-	-	-	4	4	-	-	1	1	-
	Unspecified	-	1	-	-	-	-	-	1[1)]	-	1
In total		**6**	**11**	**14**	**8**	**7**	**13**	**-**	**3[1)]**	**1**	**4**
Injured, reportable work related accidents	At marine accidents[2)]	8	9	2	-	1	-	-	-	2	-
	Work on board	573	531	506	458	383	394	329	272	316	382
	Work on board	43	16	15	19	19	12	10	7	14	9
	Unspecified	-	1	-	1	1	1	3	3	4	2

		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
In total		**624**	**559**	**523**	**478**	**404**	**407**	**342**	**282**	**336**	**393**
Injured, not reportable work related accidents	At marine accidents[2)]	2	-	-	-	-	-	-	-	-	-
	Work on board	2	2	-	9	2	1	3	2	1	-
	Unspecified	272	283	300	272	263	244	207	208	235	247
In total		**276**	**285**	**300**	**281**	**265**	**245**	**210**	**210**	**236**	**247**
In total, work related accidents		**910**	**855**	**837**	**767**	**677**	**665**	**552**	**498**	**575**	**644**

1) Including one death as a consequence of a heat stroke, on board DANICA RED in the Persian Gulf. A classification of the accident was not possible.
2) These 11 deaths can all be related to the foundering of Stevns Power off the coast of Nigeria.
3) Meaning that a marine accident was the direct cause of the death. The chain of events will not be examined in further detail to determine the cause of the marine accident.

The table below specifies the number of marine accidents concerning non-Danish citizens, who have been signed on to a Danish ship.

Table 19: Reported work related accidents (reportable or not reportable) in the merchant fleet, non-Danish citizens[1)].

		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Fatal causalities[2)]	At marine accidents	2	3	5	-	-	8[3)]	-	-	-	-
	Work on board	2	2	1	2	1	1	-	-	-	1
	Other activity, spare time	-	-	-	1	-	-	-	1	-	-
	Unspecified	-	1	-	-	-	-	-	-	-	-
In total		**4**	**6**	**6**	**3**	**1**	**9**	**-**	**1**	**-**	**1**
Injured, Reportable	At marine accidents	2	4	-	-	-	-	-	-	1	-
	Work on board	122	119	123	113	84	81	75	57	60	99
	Other activity, spare time	8	3	2	6	-	2	1	3	4	4
	Unspecified	-	-	-	-	1	-	-	-	-	-
In total		**132**	**126**	**125**	**119**	**84**	**83**	**76**	**60**	**65**	**103**
Injured, not reportable	Work on board	-	-	-	6	-	1	3	-	-	-
	Unspecified	49	56	63	71	55	43	43	43	55	74
In total		**49**	**56**	**63**	**77**	**55**	**44**	**46**	**43**	**55**	**74**
In total, work related accidents		**185**	**188**	**194**	**199**	**141**	**136**	**122**	**104**	**121**	**178**

1) Ascertained by taking the percentage of seafarers, who are not Danish citizens, and who according to the notice to the Danish Maritime Authority have been signed on as of September 30th in the year on board ships in both DIS and DAS. Present percentage rate must be used with care as a final statement of foreigner's percentage of the employed, since the notice of the persons signed is not the same as the number of employees on the ship. The time sequences could, however, be used as an indicator of the development.
2) The table shows the number of fatal causalities, where death was surely caused by an accident. Not included in the table are fatal causalities caused by illness, suicide or deaths, where there is doubt about the incident in regard to whether it can be classified as an accident.

3) These 8 deaths can all be related to the foundering of Stevens Power off the coast of Nigeria.

Seriousness of the work related accidents

The seriousness of the accidents can be assessed based on what type of injury the injured has sustained The Danish Maritime Authority defines a serious work related accident as a work related accident that results in:

• injuries on large parts of the body, or
• compound fracture / fractured bone, or
• loss of a limb.

The Danish Working Environment Authority applies the same definition.

This definition only recognizes the injury incurred, and not if the injured person is capable of working. For instance, a skipper, who breaks a finger and has it put in a splint may be able to navigate his boat the following day, but the skipper has still been involved in a serious work related accident.

The table below shows the distribution of types of injuries in reports from respectively cargo and passenger ships. The table does not comprise serious work related accidents resulting in deaths. Injuries, which have resulted in the loss of a limb or a bone fracture, which also concerns large areas of the body, are only listed once under either loss of limb or bone fracture. It is therefore not possible to directly compare the table below with table 27.

Table 20: Number of reported serious work related accidents on board merchant vessels

		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Loss of limb (amputation)	Cargo ship	4	6	2	7	2	3	5	4	6	4
	Passenger ship	-	1	-	2	2	-	1	1	1	1
Bone fracture	Cargo ship	74	44	64	74	54	55	29	23	43	54
	Passenger ship	18	17	14	10	17	12	13	10	8	7
Injuries to large areas of the body	Cargo ship	4	3	3	2	2	2	3	1	-	-
	Passenger ship	-	-	-	-	-	-	-	1	-	-
In total	**Cargo ship**	**82**	**53**	**69**	**83**	**58**	**60**	**37**	**28**	**49**	**58**
	Passenger ship	**18**	**18**	**14**	**12**	**19**	**12**	**14**	**12**	**9**	**8**

		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
	In total	**100**	**71**	**83**	**95**	**77**	**72**	**51**	**40**	**58**	**66**
Percentage of total number of report-able accidents	*%*	*15.8*	*12.5*	*15.5*	*19.6*	*18.7*	*17.1*	*14.9*	*13.9*	*17.1*	*16.6*

Table 21: Duration of the period of absence after work related accidents (re-portable or not reportable) on board fishing vessels

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	I alt
Up to and including 3 days	397	401	408	371	346	317	272	265	308	340	3 425
4 days up to and including 5 weeks	409	365	327	269	235	258	207	162	196	213	2 641
More than 5 weeks	98	78	88	119	89	77	73	69	70	87	848
Death	6	11	14	8	7	13	-	2	1	4	66
In total	**910**	**855**	**837**	**767**	**677**	**665**	**552**	**498**	**575**	**644**	**6 980**

Frequency of work related accidents

The development in DIS

The development in the number of work related reportable accidents in DIS compared to the number of engaged in DIS can be seen by calculating the number of accidents per year compared to the estimated, performed number of working hours per year. The comparison takes place only for the work related reportable accidents, because the Danish Maritime Authority does not consequently receive reports of work related accidents which are not reportable. The comparison from year to year should be read with some reservations. The risk of accidents is markedly different for the various types of ships, and the size and composition of the fleet and the distribution in the ship registers has not been constant. Changes in the DIS legislation have meant that some new types of ships have entered into the DIS, among these tugboats and ferries. Finally, the Danish Maritime Authority carried out a revision of the muster statistics in the spring of 2006, so that the number of mustered has become smaller throughout the years, which in turn has resulted in a higher frequency compared to earlier editions of Marine accidents.

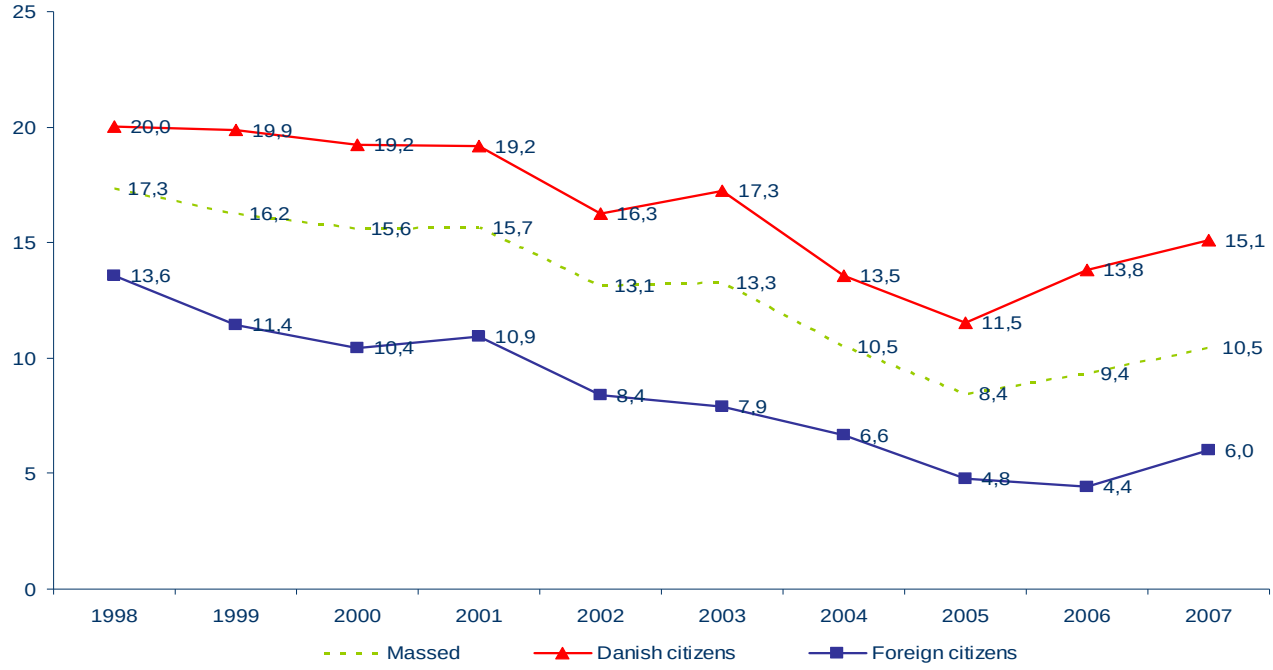

Figure 3: Development in the number of reportable accidents per 1 million working hours on all DIS ships

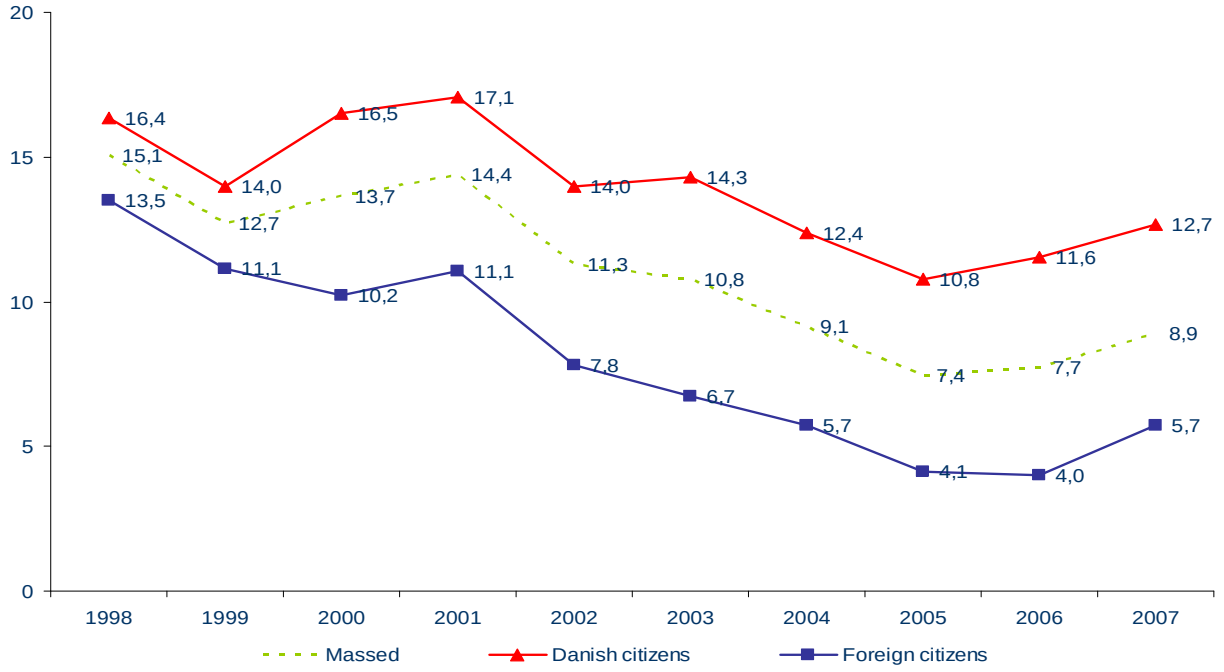

Figure 4: Development in the number of reportable accidents per 1 million working hours on the cargo ships in DIS

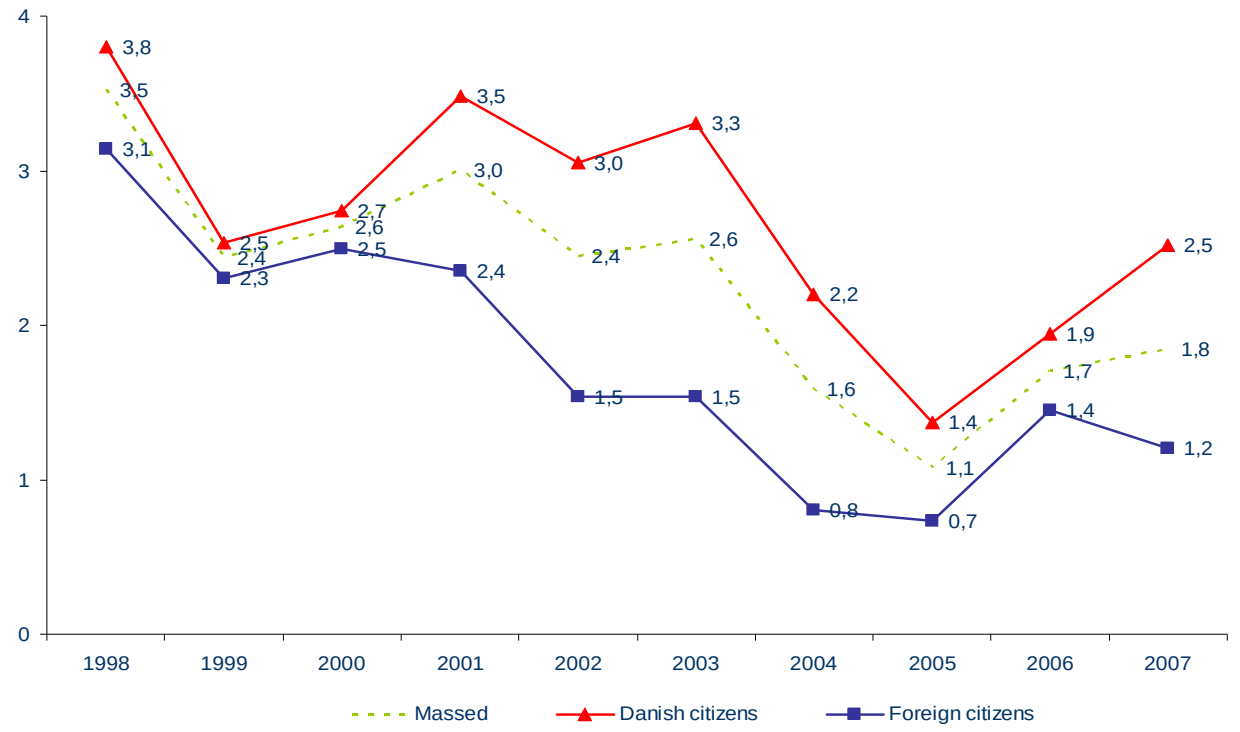

Figure 5: Development in the number of serious work related accidents per 1 million working hours on all DIS ships

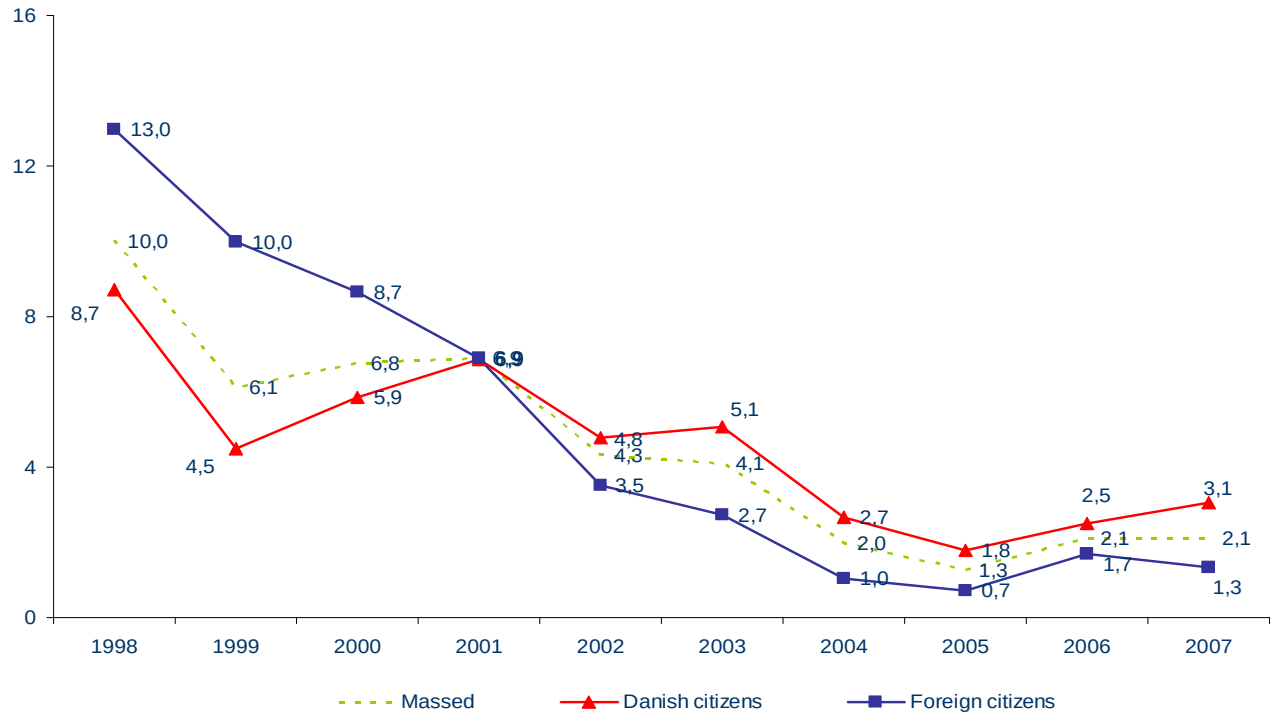

Figure 6: Development in the number of serious work related accidents per 1 million working hours on cargo ships in DIS

Incidents distributed on ship types

In the table below is shown an indication of on which types of ships work related accidents occur more often than compared to others. The table is made in such a way that the sum of the work related reportable accidents for the years 2005-2007 is related to the number of engagement days on board the ship types in question in the same period. The resulting ratios are hereafter indexed so that container carriers are equaled to index 100. Therefore, the table is to be read so that the higher the index, the more often work related accidents occurred in the past 3 years on board this ship type compared to container carriers.

Please notice that the table is not statistically significant, but only meant as an indicator of on which types of ships work related accidents are most frequent.

The ships are from both DIS and DAS.

Table 22: Number of observed work related reportable accidents compared to days of engagement distributed on ship types (during the period 2005 - 2007)

Ship type	Index
Container ship	100
Cargo ship	265
Chemical tanker	89
Oil tanker	46
Tanker	69
Cement- and product tankers	45
Passenger ship	93
Ro-Ro passenger ship	147
Cable laying vessel	178
Supply ship	219
Tug vessel	285
Barge	801
Rescue, pilot and inspection vessels	560
Ro-Ro cargo ship	358
Dredger / boulder fishing vessel	291
Other ship types	76
Average	**189**

Distribution on tonnage and registers

Table 23: Distribution of work related accidents (reportable or not reportable) on large and small merchant vessels

	Tonnage higher than 3 000 GT	Tonnage lower than 3 000 GT	In total
1998	**649**	**261**	**910**
Cargo ships	*258*	*226*	*484*
Passenger ships	*391*	*35*	*426*
1999	**592**	**263**	**855**
Cargo ships	*228*	*218*	*446*
Passenger ships	*364*	*45*	*409*
2000	**556**	**281**	**837**
Cargo ships	*239*	*252*	*491*
Passenger ships	*317*	*29*	*346*
2001	**513**	**254**	**767**
Cargo ships	*264*	*228*	*492*
Passenger ships	*249*	*26*	*275*
2002	**437**	**240**	**677**
Cargo ships	*174*	*210*	*384*
Passenger ships	*263*	*30*	*293*
2003	**447**	**218**	**665**
Cargo ships	*171*	*182*	*353*
Passenger ships	*276*	*36*	*312*
2004	**357**	**195**	**552**
Cargo ships	*148*	*172*	*320*
Passenger ships	*209*	*23*	*232*
2005	**330**	**168**	**498**
Cargo ships	*145*	*142*	*287*
Passenger ships	*185*	*26*	*211*
2006	**399**	**176**	**575**
Cargo ships	*175*	*153*	*328*
Passenger ships	*224*	*23*	*247*
2007	**429**	**215**	**644**
Cargo ships	*211*	*190*	*401*
Passenger ships	*218*	*25*	*243*

The distribution is primarily made based on gross tonnage. If the gross tonnage is not known, the gross register tonnage is applied.

Where was the merchant vessel at the time of the accident

Table 24: Where was the ship at the time of the accident (all accidents and all ships)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	In total
At sea	405	375	366	332	327	297	262	213	249	294	3 120
By shore	374	350	348	323	263	272	206	210	208	242	2 796
Unspecified	131	130	123	112	87	96	84	75	118	108	1 064
In total	**910**	**855**	**837**	**767**	**677**	**665**	**552**	**498**	**575**	**644**	**6 980**

The type of work at the time of the accident

To provide an image of which types of tasks the accidents happen at, it is relevant to look at the task the injured person was carrying out at the time of accident. The development over time is illustrated in the table below that comprises reportable and not reportable accidents.

Table 25: All work related accidents distributed by the type of work at the time of the accident for passenger ships

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	In total
Unspecified	126	127	112	99	126	127	89	104	95	93	1 098
Service work: Cleaning etc.	62	71	54	41	26	40	43	28	38	45	448
Service work: Preparation of food	38	46	26	23	23	20	20	21	29	21	267
Service work: Serving, cleaning tables, washing-up	49	31	33	27	27	18	15	16	14	15	245
Other ship work, including traffic	9	19	11	9	18	24	16	5	13	18	142
Taking on board and stowing stores	21	28	22	14	18	11	4	2	8	7	135
Deck work: work with tackle	29	23	14	16	15	12	2	1	4	-	116
Engine room: Other work, including traffic	11	11	11	9	8	12	4	6	9	9	90
Injuries occurred at ship and fire drills[1)]	9	18	12	8	8	10	9	3	8	3	88
Deck work: Other work, including traffic	6	6	9	12	7	12	12	13	17	11	105
Watch below, including traffic, shore leave	26	7	6	6	8	9	6	3	4	5	80
Deck work: Mooring, anchoring	12	8	9	5	5	9	8	7	1	8	72
Deck work; Loading and unloading of ship	14	8	14	1	2	3	3	1	5	5	56
Engine room: Maintenance and repair of machinery	12	6	13	5	2	5	1	1	1	3	49

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	In total
Personal injuries caused by marine accidents	2	-	-	-	-	-	-	-	1	-	3
In total	**426**	**409**	**346**	**275**	**293**	**312**	**232**	**211**	**247**	**243**	**2 994**

1) Injuries incurred at ship and fire drills comprise all reported work related accidents that occurred in relation with testing of safety equipment and evacuation drills.

Table 26: All work related accidents distributed by the type of work at the time of the accident for cargo ships

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	In total
Unspecified	146	158	188	174	138	119	121	106	144	158	1 453
Deck work: work with tackle	87	83	69	81	58	50	17	14	6	4	469
Deck work: Other work, including traffic	42	26	54	50	37	49	62	56	61	78	515
Engine room: Other work, including traffic	33	25	32	28	33	28	30	33	24	60	326
Other ship work, including traffic	24	24	18	30	30	21	17	15	18	22	219
Deck work: Mooring, anchoring	23	25	24	15	16	22	20	18	22	26	211
Engine room: Maintenance and repair of machinery	20	26	19	20	29	11	12	7	6	8	158
Service work: Cleaning etc.	13	21	17	19	20	11	9	12	12	11	145
Deck work; Loading and unloading of ship	15	16	16	13	11	6	15	13	12	15	132
Taking on board and stowing stores	12	18	14	20	15	12	10	4	3	1	109
Watch below, including traffic, shore leave	12	17	10	9	19	22	3	5	6	11	114
Personal injuries caused by marine accidents	8	11	17	10	2	2	11		1	1	63
Service work: Preparation of food	6	10	7	5	6	3	3	3	2	2	47
Injuries occurred at ship and fire drills[1)]	3	5	3	6	6	2		5	2		32
Service work: Serving, cleaning tables, washing-up		5	2	1	4	1	2	3		1	19
Other work directly related to fishing					1	2			1		4
Processing and canning	1			1							2
Recovery of fishing equipment				2	1					1	4
Putting out fishing equipment								1			1
In total	**484**	**446**	**491**	**492**	**384**	**353**	**320**	**287**	**328**	**401**	**3 986**

1) Injuries incurred at ship and fire drills comprise all work related accidents that occurred in relation with testing of safety equipment and evacuation drills

In the tables above injuries suffered during traffic on board is listed under “Other ship work, including traffic”. If the traffic was part of a specific task, the injury is registered under the task.

Which part of the body is injured

Table 27: Which body parts were injured in all reported work related accidents on merchant vessels

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	In total
Fingers, one or more	172	135	122	120	100	98	85	79	103	106	1 120
Back, spine	116	119	116	88	74	103	90	87	65	85	943
Foot, ankle	97	93	87	74	76	66	49	54	59	66	721
Other injury	72	69	81	72	91	55	55	52	49	57	653
Knee joint, lower leg, bunion	76	64	85	65	66	59	41	39	54	51	600
Head, except eyes	70	78	63	70	55	48	39	37	51	56	567
Head, except eyes	63	54	55	75	52	54	42	41	43	55	534
Wrist, heel of the hand	62	63	63	50	53	46	28	25	43	44	477
Eyes	46	66	53	56	29	36	38	27	35	31	417
Lower arm, wrist	45	32	35	35	17	36	24	22	33	33	312
Hip joint, thigh, knee cap	38	35	34	20	22	31	23	15	19	30	267
Hip joint, thigh, knee cap	22	23	22	26	22	19	18	6	6	11	175
Toes, one or more	11	8	6	8	12	5	3	6	7	7	73
Extensive parts of the body	8	4	3	3	3	2	4	2	-	1	30
Neck	5	4	5	1	3	1	4	3	4	4	34
Abdomen, abdomen organs	6	1	6	4	2	4	2	1	3	3	32
Unspecified	1	7	1	-	-	2	7	2	1	4	25
In total	**910**	**855**	**837**	**767**	**677**	**665**	**552**	**498**	**575**	**644**	**6 980**

Data from before 1998 is not included since the report form was changed at that time, making the years before 1998 incomparable.

Duration of period of absence

Below is stated how long the period of absence has been, meaning the period where the person involved in the work related accident has been unfit for work. The numbers are based on reports to the Danish Maritime Authority, and should be read with reservations, since no investigation has been conducted of whether the National Board of Industrial Injuries also has declared a person permanently unfit for work. Please note that the tables below do not include deaths.

Table 28: Duration of period of absence at all reported work related accidents on board the passenger ships

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	In total
Up to and including 3 days	198	207	176	137	163	164	126	128	143	136	1 578
4 days up to and including 5 weeks	201	186	152	118	106	130	92	70	93	91	1 239
More than 5 weeks	25	16	17	20	24	18	14	13	11	16	174
Death	2	-	1	-	-	-	-	-	-	-	3
In total	**426**	**409**	**346**	**275**	**293**	**312**	**232**	**211**	**247**	**243**	**2 994**

Table 29: Duration of period of absence at all reported work related accidents on board the cargo ships

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	In total
Up to and including 3 days	199	194	232	234	183	153	146	137	165	204	1 847
4 days up to and including 5 weeks	208	179	175	151	129	128	115	92	103	122	1 402
More than 5 weeks	73	62	71	99	65	59	59	56	59	71	674
Death	4	11	13	8	7	13	-	2	1	4	63
In total	**484**	**446**	**491**	**492**	**384**	**353**	**320**	**287**	**328**	**401**	**3 986**

Marine accidents involving fishing vessels

Marine accidents involving fishing vessels are categorized as follows:

- Accidents in Danish registered fishing vessels
  - Commercial fishing vessels
  - Sideline fishing vessels
- Marine accidents in Greenlandic registered fishing vessels

Marine accidents involving fishing vessels in Denmark and Greenland

In this section, all fishing vessels based in Denmark respectively Greenland are considered. The chapter contains a few overall tables for all marine accidents, the more detailed tables are specified in later sections

Engelsk oversættelse kommer

Table 30: Marine accidents involving fishing vessels

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Serious accident	3	7	8	7	3	3	7	3	3	5
Of these in Greenland	1	-	1	1	-	-	-	-	-	-
Less serious accident	11	11	17	18	11	20	22	15	27	15
Of these in Greenland	1	1	3	4	1	2	-	1	5	3
Ships that foundered	7	19	10	17	20	6	10	7	6	7
Of these in Greenland	-	2	-	2	1	-	-	-	-	2
In total	**21**	**37**	**35**	**42**	**34**	**29**	**39**	**25**	**36**	**27**

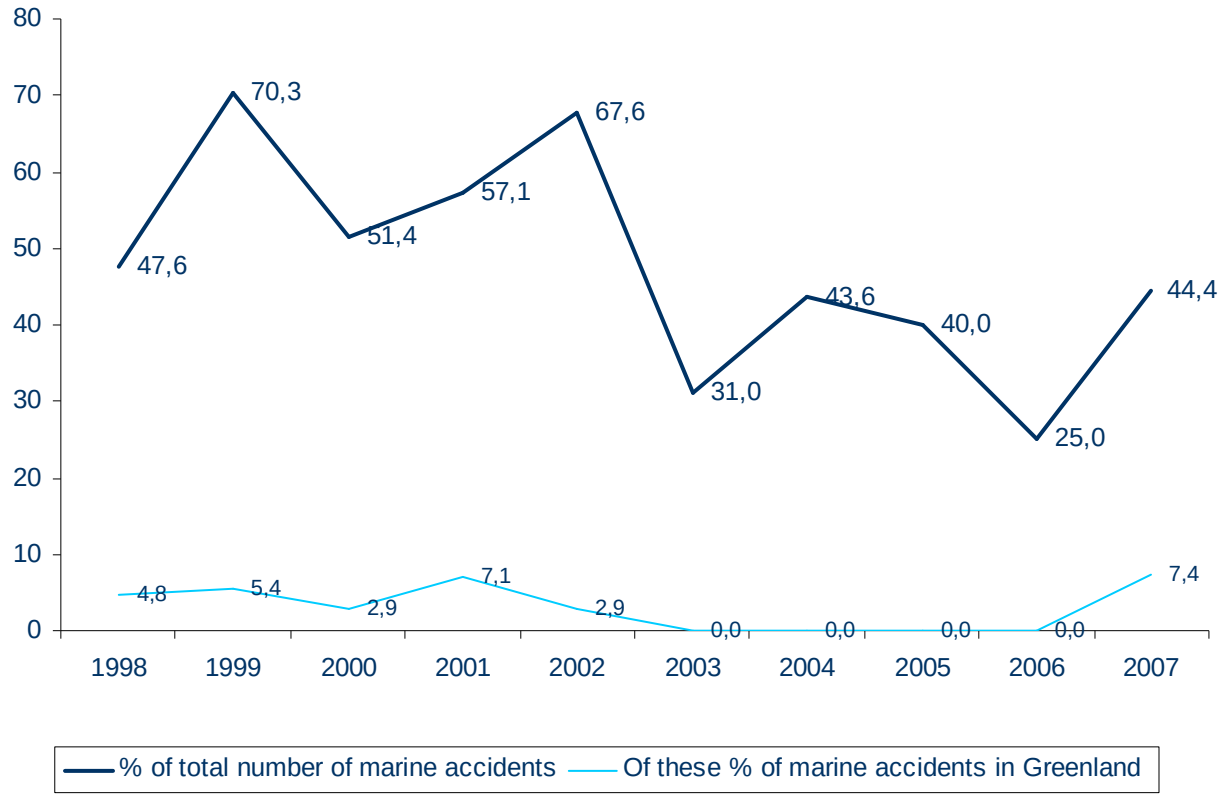

Figure 7: Percentage of ships that foundered and other serious marine accidents compared to the total number of marine accidents on fishing vessels

Table 31: Average age of the fishing vessels involved in marine accidents

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Average	28.0	30.7	31.1	30.1	32.3	30.5	32.3	36.3	26.3	29	30.6
Of these for Greenland	25.5	14.5	21.7	25.7	24	22.5	-[1)]	20	23.2	27.2	23.8

1) The Danish Maritime Authority has no data for fishing vessels in Greenland for 2004.

Table 32: Marine accidents among fishing vessels, distributed by tonnage

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Tonnage lower than 5	2	1	2	-	1	3	2	5	3	6	25
Of these in Greenland	-	-	-	-	-	-	-	-	-	1	1
Tonnage between 5 and 20	10	27	11	22	15	10	12	8	8	4	127
Of these in Greenland	2	3	1	1	1	1	-	-	-	-	9
Tonnage higher than 20	9	9	22	20	18	16	25	12	25	17	173
Of these in Greenland	-	-	3	6	1	1	-	1	5	4	21
In total	**21**	**37**	**35**	**42**	**34**	**29**	**39**	**25**	**36**	**27**	**325**

Table 33: Marine accidents among fishing vessels distributed by length

	2003	2004	2005	2006	2007	Total
Below 15 metres	**13**	**15**	**14**	**11**	**10**	**63**
Ships that foundered	2	4	4	4	4	19
Serious accident	2	2	3	1	1	8
Less serious accident	8	9	7	6	5	35
Between 15 and 24 metres	**11**	**13**	**9**	**11**	**9**	**53**
Ships that foundered	3	3	1	-	1	8
Serious accident	1	2	1	-	3	7
Less serious accident	7	8	7	11	5	38
Between 24 and 45 metres	**2**	**8**	**-**	**7**	**3**	**20**
Ships that foundered	-	2	-	-	-	2
Serious accident	-	3	-	1	1	5
Less serious accident	2	3	-	6	2	13
Above 45 metres	**-**	**1**	**2**	**-**	**2**	**5**
Ships that foundered	-		1	-	1	2
Less serious accident	-	1	1	-	1	3
Length unknown	**4**	**2**	**-**	**7**	**3**	**16**
Ships that foundered	1	1	-	2	1	5
Serious accident	-	-	-	1	-	1
Less serious accident	3	1	-	4	2	10
In total	**29**	**39**	**25**	**36**	**27**	**156**

In the above the Authority has chosen not to go further back in time as data before 2002 is invalid.

Marine accidents involving Danish registered fishing vessels

Below is shown the marine accidents on Danish registered fishing vessels.

Table 34: Marine accidents with fishing vessels, distributed by profession

	2001	2002	2003	2004	2005	2006	2007	Total
Marine accidents	**35**	**32**	**27**	**39**	**24**	**31**	**22**	**210**
Commercial fishermen	35	30	20	33	16	26	20	180
Sideline fishermen	-	-	-	-	-	1	1	2
Unspecified	-	2	7	6	8	4	1	28
Of these ships that foundered	**15**	**20**	**6**	**10**	**6**	**6**	**5**	**68**
Commercial fishermen	15	20	5	9	4	5	4	62
Sideline fishermen	-	-	-	-	-	1	1	2
Unspecified	-	-	1	1	2	-	-	4

Table 35: Distribution of types of accidents in detail

	2002		2003		2004		2005		2006		2007		I alt	
Tonnage	***<20***	***≥20***	***<20***	***≥20***	***<20***	***≥20***	***<20***	***≥20***	***<20***	***≥20***	***<20***	***≥20***	***<20***	***≥20***
Fire, accommodation quarters	-	1	1	-	-	2	-	-	-	-	-	-	1	3
Fire, engine room	-	2	3	3	2	3	2	2	-	2	4	-	11	12
Fire	-	3	4	3	2	5	2	2	-	2	4	-	12	15
Grounding	1	-	1	2	1	4	-	3	1	1	3	1	7	11
Loss	-	1	-	1	1	2	-	-	-	6	2	-	3	10
Heavy weather damage	1	-	-	-	-	-	-	-	-	-	-	-	1	-
Collision	2	7	3	4	2	5	2	3	3	5	3	2	15	26
Contact damage	-	-	-	-	1	-	-	-	-	1	-	-	1	1
Capsizing	4	-	1	1	-	-	3	-	1	2	1	-	10	3
Leakage and Watering	7	5	3	3	7	4	6	2	5	3	-	4	28	21
Engine breakdown	-	-	-	-	-	-	-	1	-	-	1	-	1	1
Collision	-	1	-	-	-	-	-	-	-	-	-	-	-	1
Collision (crash)	-	-	-	1	-	3	-	-	-	-	-	-	-	4
List	-	-	-	-	-	2	-	-	-	-	-	-	-	2
Other	-	-	-	-	-	-	-	-	1	-	1	-	2	-
In total	**15**	**17**	**12**	**15**	**14**	**25**	**13**	**11**	**11**	**20**	**13**	**9**	**92**	**110**

Table 36: Distribution of the character of the marine accidents

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Loss	7	17	10	15	19	6	10	7	6	5	102
Serious accident	2	7	7	6	3	3	7	3	3	5	46
Less serious accident	10	10	14	14	10	18	22	14	22	12	146
In total	**19**	**34**	**31**	**35**	**32**	**27**	**39**	**24**	**31**	**22**	**294**

Table 37: Danish fishing vessels that foundered, types of accidents

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Fire, accommodation Quarters	-	-	-	-	1	-	1	-	-	-
Fire, engine room	1	1	-	4	-	1	2	1	-	1
Fire	1	1	-	4	1	1	3	1	-	1
Grounding	-	1	-	-	-	-	-	-	-	-
Loss	-	-	-	-	1	-	-	-	-	-
Heavy weather damage	-	1	-	-	1	-	-	-	-	-
Collision	1	2	2	4	2	1	1	1		2
Contact damage	-	-	1	-	-	-	1	-	-	-
Capsizing	1	8	4	5	4	2		2	2	1
Leakage and watering	4	2	2	2	10	2	3	3	4	1
Collision	-	-	-	-	-	-	-	-	-	-
Collision (crash)	-	2	1	-	-	-	2	-	-	-
In total	**7**	**17**	**10**	**15**	**19**	**6**	**10**	**7**	**6**	**5**

Table 38: Serious marine accidents with Danish fishing vessels, types of accidents

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Fire, accommodation quarters	-	-	-	1	-	-	1	-	-	-
Fire, cargo / tank	-	-	-	1	-	-	-	-	-	-
Fire, engine room	-	1	3	1	2	-	1	2	1	1
Fire		1	3	3	2		2	2	1	1
Grounding	1	-	1	1	-	1	1	-	-	1
Collision	1	6	2	1	1	1	3	-	-	3
Contact damage	-	-	-	-	-	-	-	-	1	-
Capsizing	-	-	-	-	-	-	-	-	1	-
Leakage and watering	-	-	-	-	-	-	-	1	-	-
Collision (crash)	-	-	1	1	-	1	1	-	-	-
In total	**2**	**7**	**7**	**6**	**3**	**3**	**7**	**3**	**3**	**5**

Table 39: Less serious marine accidents with Danish fishing vessels, types of accidents

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Fire, accommodation quarters	1	-	1	-	-	1	-	-	-	-
Fire, engine room	2	2	2	2	-	5	2	1	1	2
Fire	3	2	3	2	-	6	2	1	1	2
Grounding	2	-	1	1	1	2	4	3	2	3
Loss	-	-	-	-	-	1	3	-	6	2
Collision	3	3	6	9	6	5	3	4	8	-
Contact damage	1	-	1	1	-	-	-	-	-	-
Capsizing	-	-	-	-	-	-	-	1	-	-
Leakage and watering	1	4	3	-	2	4	8	4	4	3
Engine breakdown	-	-	-	-	-	-	-	1	-	1
Collision (crash)	-	1	-	1	1	-	-	-	-	-
List	-	-	-	-	-	-	2	-	-	-
Other	-	-	-	-	-	-	-	-	1	1
In total	**10**	**10**	**14**	**14**	**10**	**18**	**22**	**14**	**22**	**12**

Work related accidents on fishing vessels

In this chapter the number of work related accidents, in relation to work on board Danish and Greenlandic fishing vessels, which the Danish Maritime Authority was informed about at March 1st 2008 at the latest, is described.

The actual number of work related accidents is higher, since not all accidents are reported to the Danish Maritime Authority.

In the table below, the work related accidents are specified according to the consequences of the accidents and also the primary cause of the accident. There are often several causal factors leading up to the accident. It would, however, be too extensive to process all the causal factors here.

Table 40: All received work related accidents (reportable and not reportable) in the fishing fleet, all nationalities

		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Fatal Casualties[1)]	At marine accidents	4	5	-	3	1	5	4	-	1	2
	Work on board	1	2	1	2	2	4	1	2	1	1
	Other activity, spare time	1	-	-	-	1	2	-	1	1	-
	Others	-	-	-	-	-	-	-	-	-	-
In total		**6**	**7**	**1**	**5**	**4**	**11**	**5**	**3**	**3**	**3**
Injured, reportable	At marine accidents	1	5	4	11	19	4	7	2	2	8
	Work on board	185	187	243	198	172	153	110	94	72	70
	Other activity, spare time	1	2	1	1	1	-	1	-	-	-
	Unspecified		1	1	-	-	-	-	2	1	-
In total		**187**	**195**	**249**	**210**	**192**	**157**	**118**	**98**	**75**	**78**
Injured, not reportable	Work on board	2	-	-	1	-	3	-	-	-	-
	Unspecified	27	32	36	52	34	27	18	16	11	8
In total		**29**	**32**	**36**	**53**	**34**	**30**	**18**	**16**	**11**	**8**
Work related accidents in total		**222**	**234**	**286**	**268**	**230**	**198**	**141**	**117**	**89**	**89**

1) The table shows the number of fatal causalities, where death was surely caused by an accident. Not included in the table are fatal causalities caused by illness, suicide or deaths, where there is doubt about the incident in regard to whether it can be classified as an accident.

Below the development in the number of work related reportable accident is shown compared to the number of fishermen at end-year. In this table it has been decided only to consider reportable accidents, since the Danish Maritime Authority does not obtain knowledge of all work related accidents that are not reportable.

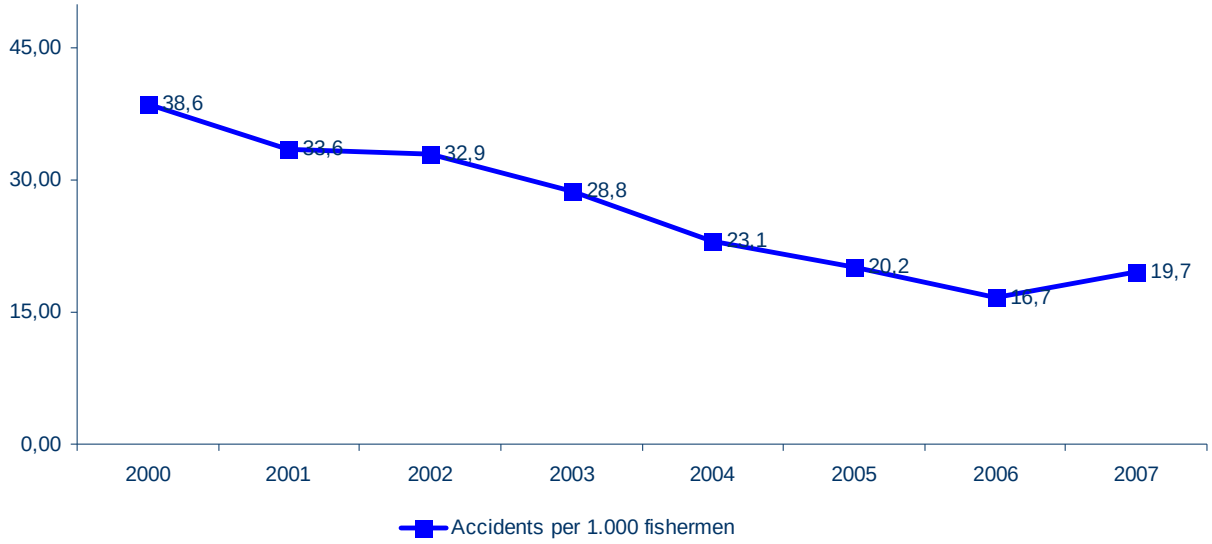

Figure 8: Work related reportable accidents per 1,000 fishermen

Seriousness of work related accidents

The seriousness of the accidents can roughly be estimated on the basis of which kind of injury the injured person has suffered.

The Danish Maritime Authority defines a serious work related accident as a work related accident that causes:

- harm to extensive parts of the body, or
- bone fracture / compound fracture, or
- loss of limb

The Danish Working Environment Authority applies the same definition.

This definition only recognizes the injury, and not whether the injured is capable of working. For instance, a skipper who breaks his finger and has it put into a splint may be able to navigate his ship the following day, but the skipper has still suffered a severe work related accident.

The table does not comprise severe work related accidents that resulted in death. Injuries, which have resulted in the loss of a limb or bone fracture, which also concern extensive parts of the body, are only listed

once under either loss of limb or bone fracture. It is therefore not possible to compare this table directly to table 44: *Which body parts are injured in work related accidents on board fishing vessels.*

Table 41: Reported serious work related accidents on board fishing vessels

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Loss of limb	8	7	9	3	10	8	5	1	1	2
Bone fracture	53	45	61	47	39	37	24	26	22	11
Accidents that cover extensive parts of the body	1	3	1	3	4	1	1	-	1	1
In total	**62**	**55**	**71**	**53**	**53**	**46**	**30**	**27**	**24**	**14**
Percentage of total reportable accidents	*32.1*	*27.2*	*28.4*	*24.7*	*27.0*	*27.4*	*24.6*	*26.7*	*31.2*	*30.8*

Where was the fishing vessel at the time of the accident

Table 42: Where was the fishing vessel at the time of the work related accident (all accidents)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	In total
At sea	151	172	203	186	158	141	105	77	70	53	1 316
By shore	49	46	60	44	47	41	25	24	13	20	369
Unspecified	22	16	23	38	25	16	11	16	6	16	189
In total	**222**	**234**	**286**	**268**	**230**	**198**	**141**	**117**	**89**	**89**	**1 874**

Type of work at the time of the accident

To provide an image of which type of work was performed at the times of accidents on board fishing vessels, the table below shows all accidents distributed by the type of work carried out at the time of the accident.

Table 43: Distribution of the type of work on board fishing vessels at the time of the accident (reportable or not reportable)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	In total
Other work directly related to fishing	46	27	42	49	31	55	56	52	27	38	423
Recovery of fishing equipment	54	49	71	51	41	39	27	19	27	14	392
Unspecified	27	33	36	52	34	27	18	19	12	8	266
Processing and preserving of fish	27	31	49	40	31	14	13	3	5	4	217
Preparation and repair of equipment	34	21	46	28	39	26	2	6	3	3	208
Posting of fishing equipment	9	27	20	14	20	14	10	10	10	5	139
Personal injuries caused by marine accidents	5	10	5	14	20	9	11	1	3	10	88
Deck work: Mooring, anchoring	7	11	2	4	3	4	-	-	-	-	31
Deck work: Work with tackle	2	6	2	2	3	3	-	1	-	-	19
Watch below, including traffic, shore leave	2	2	1	1	2	2	1	1	1	-	13
Engine room: Other work, including traffic	-	2	1	6	-	2	1	-	-	2	14
Taking on board and stowing of stores	3	6	1	2	-	-	-	-	-	1	13
Deck work: Other work, including traffic	2	1	3	-	-	1	1	1	-	2	11
Other ship work, including traffic	-	-	-	-	4	1	1	4	-	1	11
Engine room: Maintenance and repair of machinery	1	1	2	2	-	1	-	-	-	-	7
Deck work: Loading and unloading	-	3	2	2	1	-	-	-	1	-	9
Service: Preparation of food	3	3	2	1	-	-	-	-	-	-	9
Service: Cleaning	-	-	1	-	1	-	-	-	-	1	3
Injuries occurred at boat and fire drills	-	1	-	-	-	-	-	-	-	-	1
In total	**222**	**234**	**286**	**268**	**230**	**198**	**141**	**117**	**89**	**89**	**1 874**

Which part of the body was injured

Table 44: Which body parts are injured in work related accidents on board fishing vessels

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	In total
Fingers, one or more	45	46	65	43	47	36	25	19	15	8	349
Other injury	28	28	37	49	48	40	26	17	14	14	301
Back, spine	26	30	35	37	23	29	17	15	14	12	238
Shoulder, upper arm, joint elbow	15	23	23	17	25	13	10	11	5	6	148
Wrist, heel of the hand	27	18	15	25	11	13	12	9	8	6	144
Knee joint, lower leg, bunions	16	21	17	20	13	11	13	10	7	9	137
Head, except eyes	21	16	19	25	11	13	8	9	5	7	134
Foot, ankle	14	13	20	14	14	11	10	12	7	2	117
Chest, chest organs	6	12	13	19	9	5	6	2	2	3	77
Lower arm, wrist	7	7	13	5	8	10	5	2	7	9	73
Hip joint, thigh, knee cap	7	4	10	3	8	7	2	4	2	3	50
Eyes	2	5	10	4	2	3	1	3	-	2	32
Toes, one or more	3	3	5	3	4	3	2	1	-	5	29
Extensive parts of the body	1	4	2	3	4	1	1	-	1	1	18
Unspecified	1	3	-	-	-	2	3	1	2	2	14
Abdomen, abdomen organs	-	1	2	-	2	1	-	1	-	-	7
Neck	3	-	-	1	1	-	-	1	-	-	6
In total	**222**	**234**	**286**	**268**	**230**	**198**	**141**	**117**	**89**	**89**	**1 874**

Data before 1998 is not included since there was a change in the reporting form at that point, making the years before 1998 incomparable.

Duration of the period of absence

Below is indicated how long the period of absence has lasted, meaning the period where the person implicated in the work related accident has been unfit for work. The numbers are based on reports to the Danish Maritime Authority, and they should be treated with a considerable measure of reserve since no investigation has been conducted of whether the National Board of Industrial Injuries also has declared a person permanently unfit for work.

Table 45: Duration of the period of absence after work related accidents (reportable or not reportable) on board fishing vessels

	1999	2000	2001	2002	2003	2004	2005	2006	2007	In total
Up to and including 3 days	35	41	56	35	33	20	16	13	14	264
4 days up to and including 5 weeks	132	166	144	133	103	88	62	52	51	931
More than 5 weeks	60	78	63	58	51	28	36	21	21	416
Death	7	1	5	4	11	5	3	3	3	42
In total	**234**	**286**	**268**	**230**	**198**	**141**	**117**	**89**	**89**	**1 652**

Marine accidents involving foreign ships in Danish territorial waters

This chapter describes marine accidents involving foreign ships in Danish territorial waters which have been reported to the Danish Maritime Authority. It is not a complete overview, but a collection of own investigations, announcements from the Admiral Danish Fleet etc.

The Danish Maritime Authority is often not informed of less serious accidents with foreign ships, since accidents in Danish waters for foreign ships are not reportable.

The Danish Maritime Authority has registered this type of accidents since 1997. However, it was not until 2001 that methodical registration of detailed information began. Nevertheless, all registrations are included for the sake of completeness.

Ships registered on the Faeroe Islands are included in this statistics as foreign ships.

Table 46: Marine accidents on board foreign ships in Danish waters

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	In total
Fire	1	2	-	3	3	-	1	-	-	-	10
Fire – cargo / tank	-	-	-	-	-	-	-	1	-	-	1
Fire – engine room	-	-	-	-	-	-	-	3	3	3	9
Pollution	-	-	-	2	2	1	3	-	-	-	8
Accident in spare time	-	-	-	-	-	-	-	1	1	-	2
Grounding	19	26	23	21	22	15	19	23	22	31	221
Loss	2	-	-	-	-	2	1	-	1	2	8
Hard weather damage	-	-	-	-	-	-	-	-	-	2	2
Collision	16	9	15	15	6	9	14	18	12	8	122
Contact damage	-	1	-	1	1	1	3	5	2	4	18
Capsizing	-	-	-	-	-	-	-	-	-	1	1
Leakage / watering	-	-	-	-	-	-	-	-	1	2	3
Engine break down	-	-	-	-	-	-	-	1	-	-	1
Collision (crash)	2	2	-	1	1	1	1	-	-	4	12
List	1	-	1	1	-	-	-	-	-	-	3
Water penetration	-	-	-	-	-	1	-	-	-	-	1
Other	-	-	-	-	-	-	-	8	1	4	13
In total	**41**	**40**	**39**	**44**	**35**	**30**	**42**	**60**	**43**	**61**	**435**

Collision and other collision (crash) indicate the number of ships involved. If the number is odd, it indicates that a Danish ship has been involved in the accident, or that the other ship has not been registered.

Table 47: What types of foreign ships have been involved in an accident in Danish waters

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	In total
Tug boat	-	1	-	1	1	-	1	2	-	3	9
Bulk carrier	2	4	4	8	6	5	3	12	6	8	58
Container ship	-	-	2	1	1	1	2	2	4	3	16
Fishing vessel, GT >= 20	3	6	3	5	2	2	1	3	4	3	32
Pleasure boat	-	-	-	1	-	-	-	-	-	-	1
Gas tanker	-	-	1	-	-	-	-	-	-	1	2
Chemical tanker	-	-	-	2	1	1	3	-	-	-	7
Oil tanker	6	5	6	5	4	3	5	12	4	4	54
Passenger ship	-	1	1	1	-	2	-	-	2	2	9
Reefer	2	-	3	2	1	1	2	4	-	2	17
Ro-Ro cargo ship	1	1	-	1	2	1	1	3	2	3	15
Ro-Ro passenger ship	1	-	-	-	-	2	2	1	1	3	10
Sand-pumb dredger and boulders fishing dredger	-	-	-	-	-	-	-	-	-	1	1
Training ship	-	-	1	-	-	-	-	-	-	-	1
Supply ship	-	1	-	-	-	-	1	-	-	-	2
General cargo multi-purpose ship	16	15	14	14	14	11	20	19	19	26	168
Dredging dredger	-	-	-	-	-	-	-	-	-	1	1
Other	10	6	4	3	3	1	1	2	1	1	32
In total	**41**	**40**	**39**	**44**	**35**	**30**	**42**	**60**	**43**	**61**	**435**

Groundings and collisions in Danish waters

In this chapter, it will be documented where these accidents happen, what types of ships are harmed and precisely which ships have been involved.

These overviews contain only the accidents of which the Danish Maritime Authority has obtained knowledge about by March 1st 2008. The registrations from the first years (from 1998 and onwards) have been particularly incomplete. Not until the end of 2004 has all information registered for Danish ships been registered for foreign ships. This is expressed by the overviews of the individual accidents where the Danish Maritime Authority on several occasions has not registered the other ship in a collision/collision (crash). Due to these information gabs, the Authority has chosen first to specify the individual accidents from and including 2001, when the methodical registration of accidents with foreign ships in Danish waters began.

Collisions or other collisions (crash) are only counted as one accident, even though two ships are involved. This is in opposition to the rest of the report, where a collision counts as two accidents (one for each ship). The category collisions comprises actual collisions, where two ships in operation navigate into each other and other collisions (crash), where a ship in speed navigates into a ship that is not operating.

The choice of areas for analysis in this section is the areas where most accidents happen or where the Authority has experienced in practice that the major accidents take place. However, a count has only been carried out for groundings and collisions that have taken place in the waters by Denmark and Greenland within the EEZ. In the overview below all registered accidents are shown. A division of the accidents according to severity has not been made.

Table 48: Groundings and collisions with all ships in Danish waters, distributed on selected waters in the period 1997 - 2006

	Groundings	Collisions	In total
The Sound: Drogden 5533 N – 5545 N	46	9	55
The Baltic: Falsterbo / Stevns – Stevns / Hellehavn – Moen / Darsser Ort – 1631 E	61	19	80
The Great Belt: Hatter 5535 N – 5600 N	23	4	27
Skagerrak within the EEZ, Hanstholm / Lindenes	3	19	22
Kadetrenden: Moen / Darsser Ort – 1135 E	16	2	18
Other Danish waters	12	5	17
Other Danish waters	253	104	357
In total	**414**	**161**	**576**

The Sound: Drogden 5533 N – 5545 N

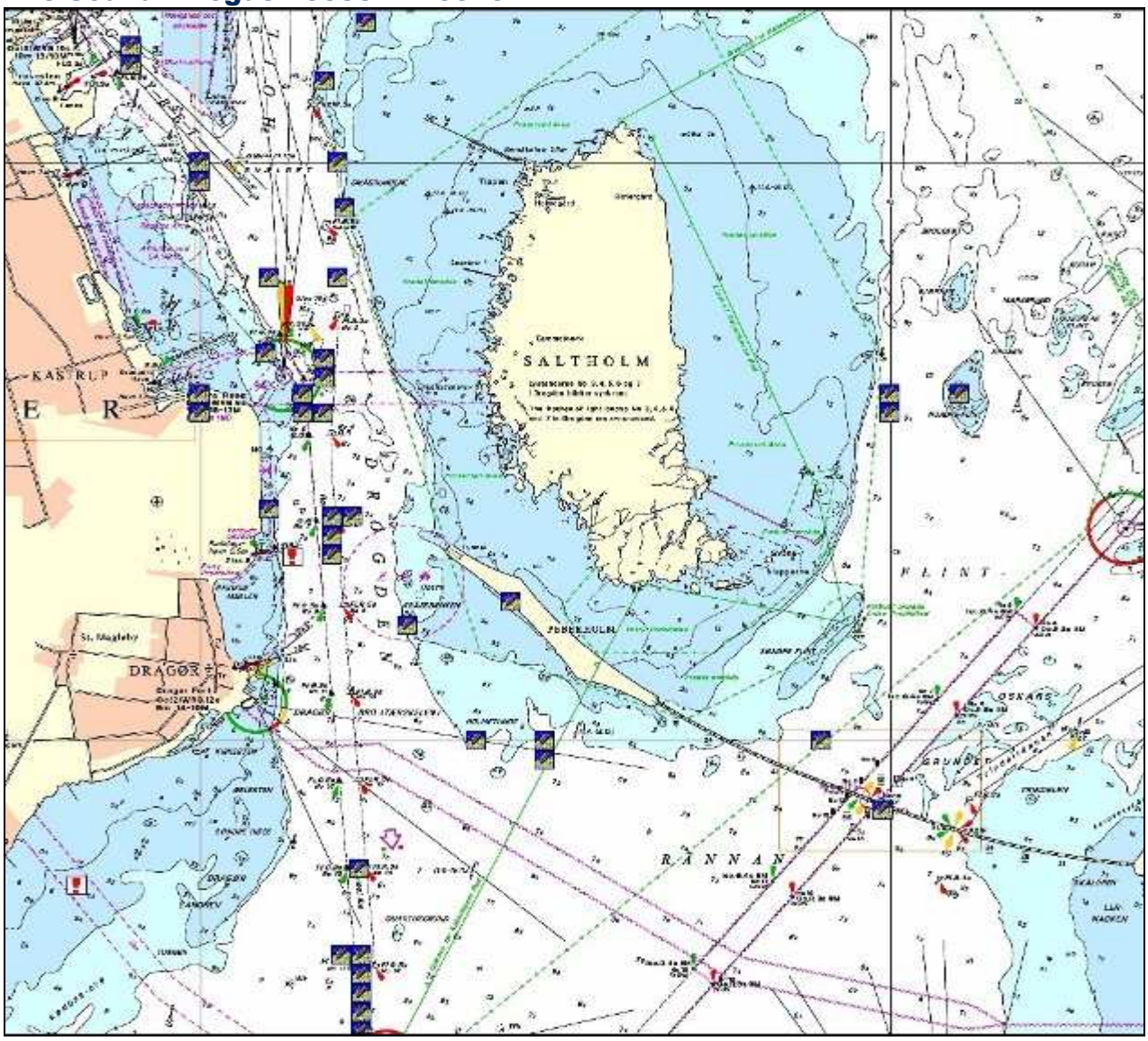

Figure 9: Groundings and collision in the area around Drogden

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Grounding	4	10	9	8	5	1	1	3	2	3
Collision / other collision (crash)	4	-	1	1	1	-	1	-	-	1

The Sound: Drogden					
	Ship´s name	**Type of accident**	**Flag**	**Date of accident**	**Type of ship**
2002	NORD TRANSPORTER	Grounding	Sweden	April 15th	General cargo multi-purpose ship
	VINGAREN	Collision	Sweden	October 2nd	General cargo multi-purpose ship
	GARDEN	Collision	Finland	October 2nd	Ro-Ro cargo ship
	HOHEWEG	Grounding	Germany	November 2nd	Container ship
	BOW FAGUS	Grounding	Norway	November 21st	Chemical tanker
	BALTIC SWAN	Grounding	Great Britain	November 29th	Oil tanker
	FONNES	Grounding	St. Vincent	December 29th	Bulk carrier
2003	LAGUNA	Grounding	St. Vincent	February 22nd	General cargo multi-purpose ship
2004	RAZNA	Grounding	Liberia	January 17th	Oil tanker
	LINK STAR	Collision	Finland	November 5th	Ro-Ro cargo ship
	VERONIKA GOKOTI	Collision	Belize	November 5th	General cargo multi-purpose ship
2005	TELL AVIE	Grounding	Denmark	May 2nd	Fishing vessel, GT >= 20
	MUNSU	Grounding	Belize	May 12th	General cargo multi-purpose ship
	HRINGUR	Grounding	Iceland	December 3rd	Fishing vessel, GT >= 20
2006	PAVEL KUTAKHOV	Grounding	Russia	January 13th	Fishing vessel, GT >= 20
	PLATO	Grounding	Barbados	August 4th	General cargo multi-purpose ship
2007	HAARH BRIDGE	Collision (crash)	United Kingdom	August 17th	Oil tanker
	VOLGO-BALT 210	Grounding	Russia	September 25th	General cargo multi-purpose ship
	ONEGO MERCHANT	Grounding	The Netherlands	December 16th	General cargo multi-purpose ship
	NESCO REEFER	Grounding	St.Vincent	December 30th	Reefer

North-west of Bornholm, the Bornholmsgat

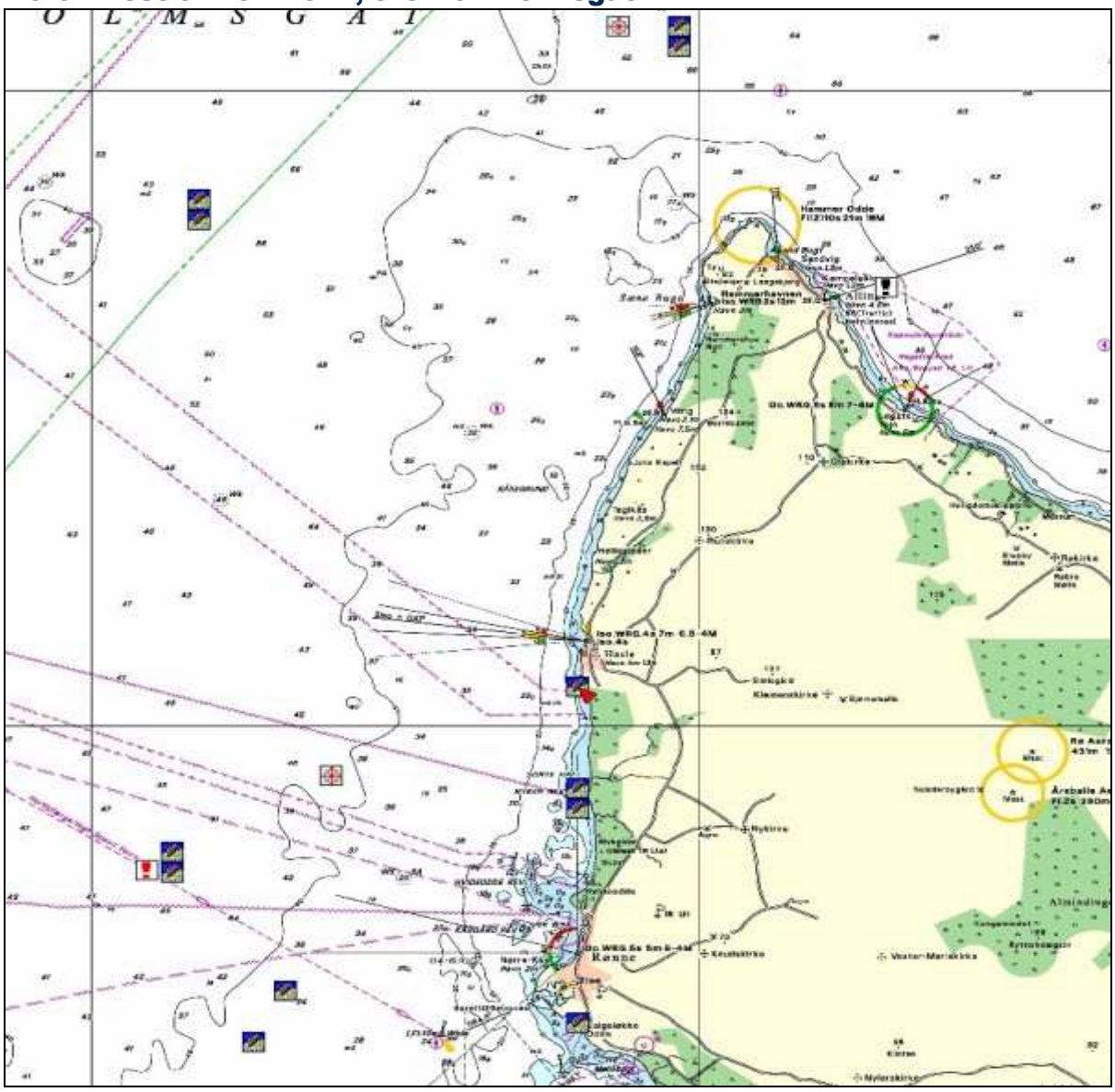

Figure 10: Groundings and collisions in the area north-west of Bornholm, the Bornholmsgat

It has not been possible for the Danish Maritime Authority to separate the accidents that have taken place in or around the Bornholmsgat. The Danish Maritime Authority has only registered accidents that have taken place in the western Baltic Sea. That area is too large to provide a fair presentation.

The Great Belt: Hatter 5535 N – 5600 N

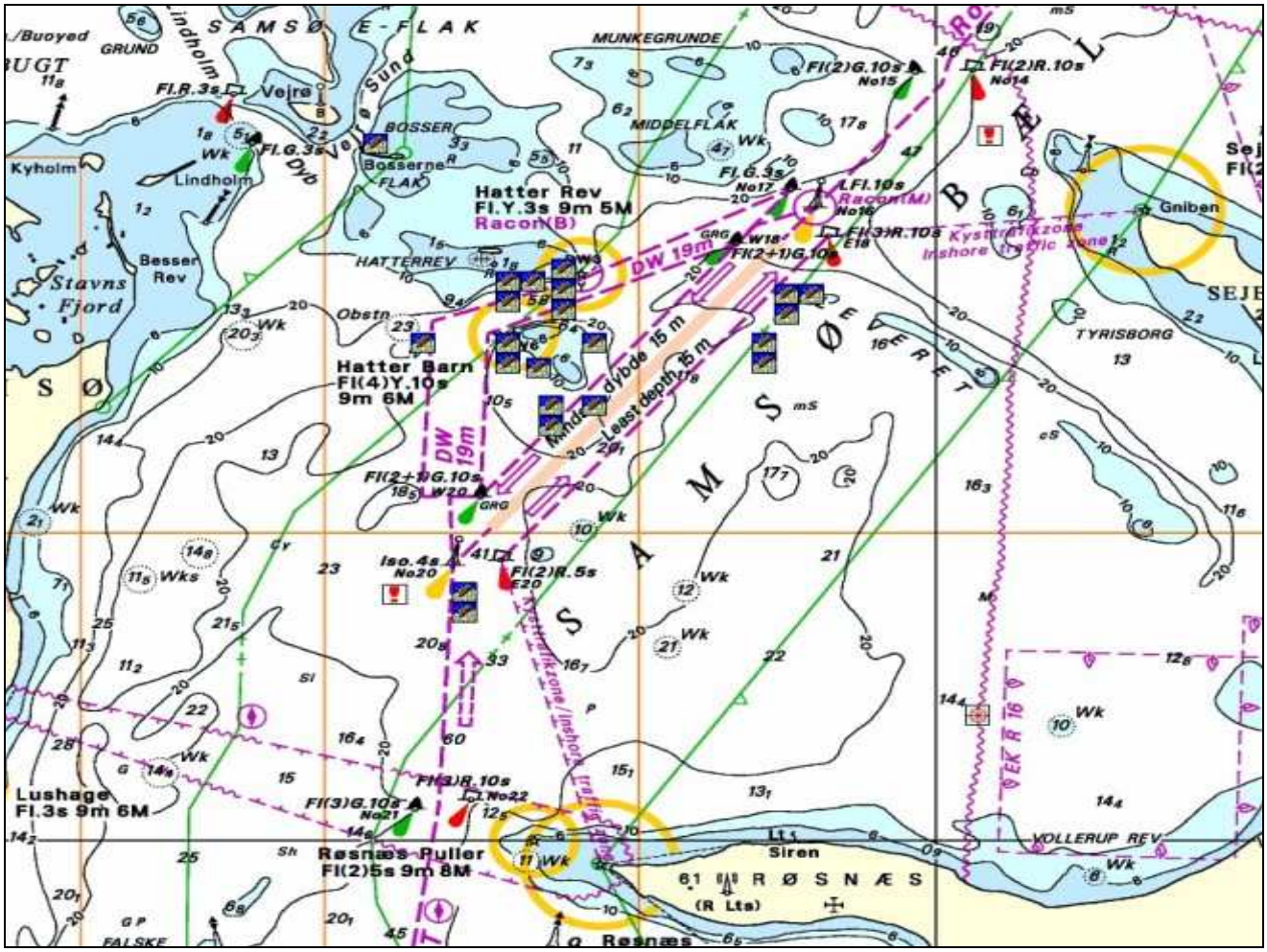

Figure 11: Groundings and collisions in the area around Hatter Barn

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Grounding	1	4	2	3	1	3	4	4	-	1
Collision / other collision (crash)	1	-	-	1	-	1	-	-	1	-

The Great Belt: Hatter					
	Ship´s name	**Type of accident**	**Flag**	**Date of accident**	**Type of ship**
2001	BELLA	Grounding	Cambodia	May 16th	Bulk carrier
	BRAGE PACIFIC	Grounding	Norway	May 29th	Chemical tanker
	LILLE TANJA	Collision	Denmark	June 16th	General cargo multi-purpose ship
	NORDFJORD	Grounding	Holland	August 30th	General cargo multi-purpose ship
2002	ESPERIS P	Grounding	Greece	January 30th	Bulk carrier
2003	ACUSHNET	Grounding	Bahamas	February 7th	Oil tanker
	HISPANIA GRAECA	Grounding	Cyprus	November 3rd	Bulk carrier
	KINGSTON TRADER	Collision	Philippines	November 29th	Bulk carrier
	LADYBIRD	Collision	St. Vincent	November 29th	General cargo multi-purpose ship
	EKTURUS	Grounding	Great Britain	December 9th	Oil tanker
2004	STADIONGRACHT	Grounding	Holland	July 11th	General cargo multi-purpose ship
	METTE EMILIE	Grounding	Denmark	July 24th	Other ship
	SAINT NICHOLAS	Grounding	Greece	August 30th	Bulk carrier
	FOTINI LADY	Grounding	Liberia	September 30th	Oil tanker
2005	ALGA	Grounding	St. Vincent	January 19th	General cargo multi-purpose ship
	ALEXIA M	Grounding	Cyprus	March 22nd	Bulk carrier
	POCHARD	Grounding	Antigua	June 26th	Bulk carrier
	EVER MIGHTY	Grounding	Panama	November 11th	Bulk carrier
2006	NS CONCORD	Collision	Liberia	March 26th	Oil tanker
	DANASUND	Collision	Denmark	March 26th	Tug vessel
2007	MINERVA CONCERT	Grounding	Greece	May 14th	Oil tanker

The Skagerrak within the EEZ: 5745 N – Hanstholm / Lindeness

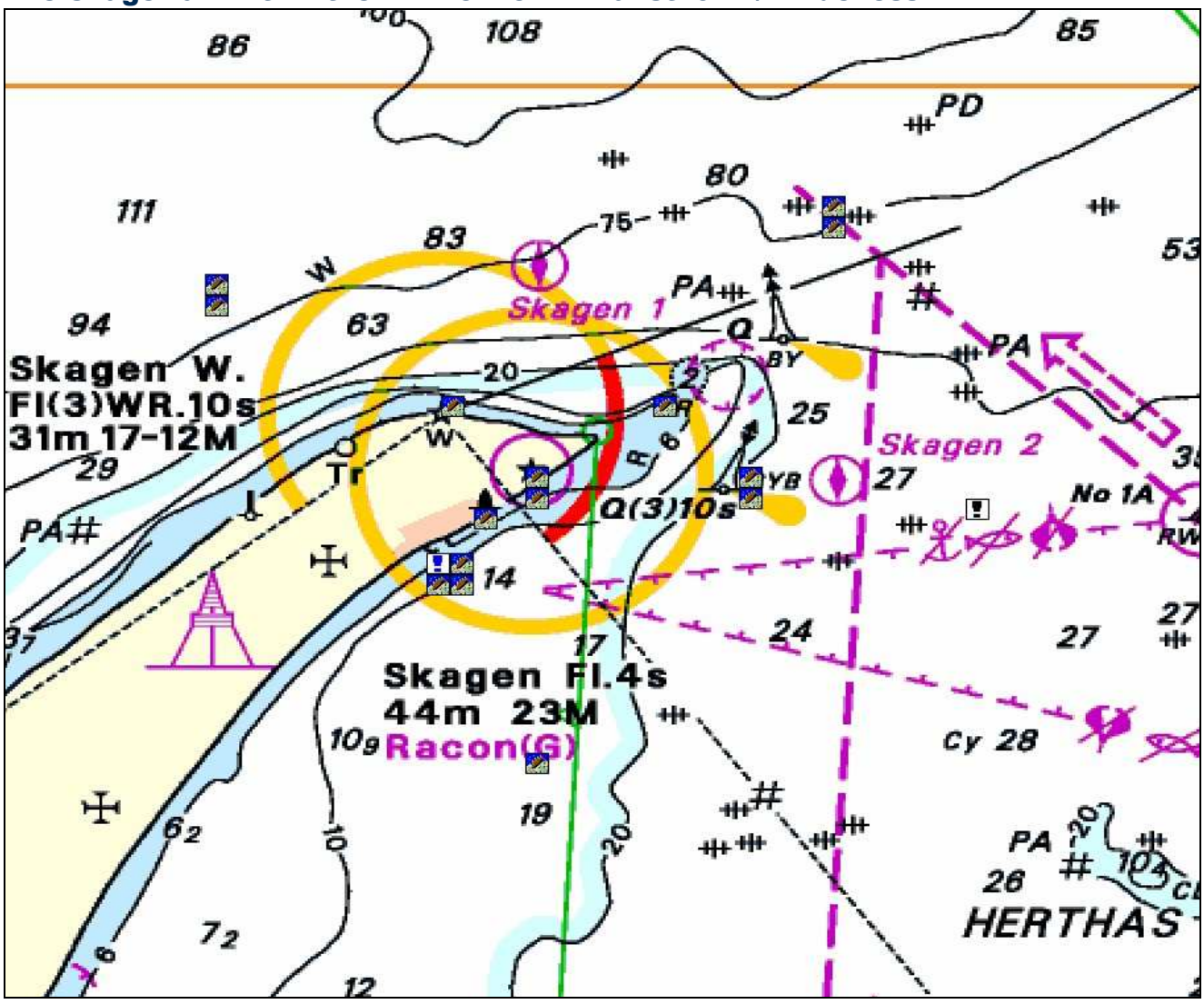

Figure 12: Groundings and collisions in the area around Skagerrak

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Grounding	-	-	-	-	1	1	-	-	1	-
Collision / other collision (crash)	2	2	1	3	1	1	4	3	-	2

Skagerak within the EEZ					
	Ship´s name	**Type of accident**	**Flag**	**Date of accident**	**Type of ship**
2002	ARKADIA	Grounding	Finland	August 1st	Bulkcarrier
	FINNMERSHANT	Collision	Finland	August 12th	Ro-Ro cargo ship
2003	METTE ELIASEN	Collision (crash)	Denmark	March 15th	Fishing vessel, GT >= 20
	FREYJA	Collision (crash)	Malta	March 15th	Chemical tanker
	UNITED TALENT	Grounding	Panama	Oktober 18th	Bulk carrier
2004	SØREN KANNE	Collision	Denmark	May 11th	Fishing vessel, GT >= 20
	ORASUND	Collision	Denmark	May 11th	Oil tanker
	THRONDER	Collision	Denmark	September 3rd	Fishing vessel, GT >= 20
	HERMES	Collision	St. Vincent	September 3rd	Chemical tanker
	GITTE TORBEN	Collision	Denmark	September 5th	Fishing vessel, GT >= 20
	CHRISTINA	Collision	Denmark	September 11th	Fishing vessel, GT >= 20
	PIONER BELORUSSII	Collision	Russia	September 11th	General cargo multi-purpose ship
2005	TOMMY KRISTINE	Collision	Denmark	May 2nd	Fishing vessel, GT < 20
	UKENDT SKIB	Collision	Unknown	May 2nd	Other ship
	BIRTHE JØRGENSEN	Collision	Denmark	June 15th	Fishing vessel, GT >= 20
	RYSUM	Collision	Antigua	June 15th	General cargo multi-purpose ship
	MATTERHORN	Collision	Liberia	August 16th	Reefer
	MALASPINA CASTLE	Collision	Cayman Islands	August 16th	General cargo multi-purpose ship
2006	VELOS	Grounding	Cyprus	September 3rd	Bulk carrier
2007	K. LARSON	Collision	Denmark	March 28th	Fishing vessel, GT >= 20
	MISTRAL	Collision	Turkey	March 28th	General cargo multi-purpose ship
	SØREN KRISTINE	Collision	Denmark	June 2nd	Fishing vessel, GT >= 20
	MICHELLE	Collision	Denmark	June 2nd	Fishing vessel, GT >= 20

The area around Kadetrenden: Moen / Darsser Ort – 1135 E

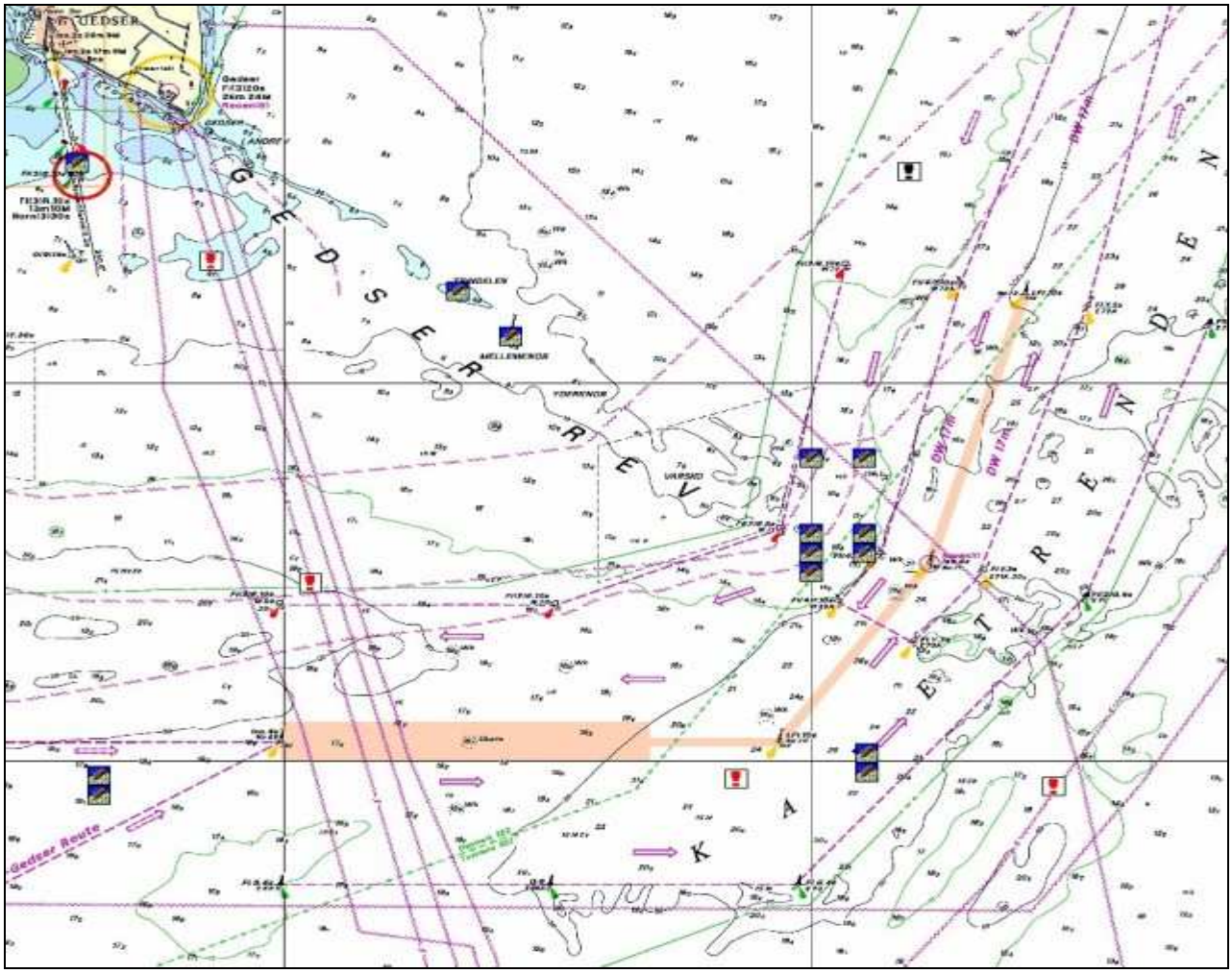

Figure 13: Groundings and collisions in the area around Kadetrenden

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Grounding	2	4	2	4	-	1	-	1	2	-
Collision / other collision (crash)	-	1	-	-	-	-	-	-	-	1

Kadetrenden					
	Ship´s name	**Type of acci-dent**	**Flag**	**Date of acci-dent**	**Type of ship**
2001	VØLUND / BALDUR	Grounding	Denmark	January 27th	Tug vessel
	FRIENDLY OCEAN	Grounding	Panama	January 27th	Bulk carrier
	NIKOLAOS P	Grounding	Cyprus	May 1st	Bulk carrier
	PRINS JOACHIM	Grounding	Denmark	November 10th	Ro-Ro passenger ship
2003	DRONNING MARGRETHE	Grounding	Denmark	January 11th	Ro-Ro passenger ship
	REBECCA S	Collision (crash)	Holland	February 27th	Other ship
2005	SYDSTRAUM	Grounding	Norway	December 28th	Oil tanker
2006	BERIT	Grounding	Great Brit-ain	January 5th	Container ship
	PINE ARROW	Grounding	Bahamas	December 24th	General cargo multi-purpose ship
2007	PIONEER	Collision	Comoros	May 29th	Tug vessel
	KRISTINA REGINA	Collision	Finland	May 29th	Passenger ship

The Great Belt: The VTS area

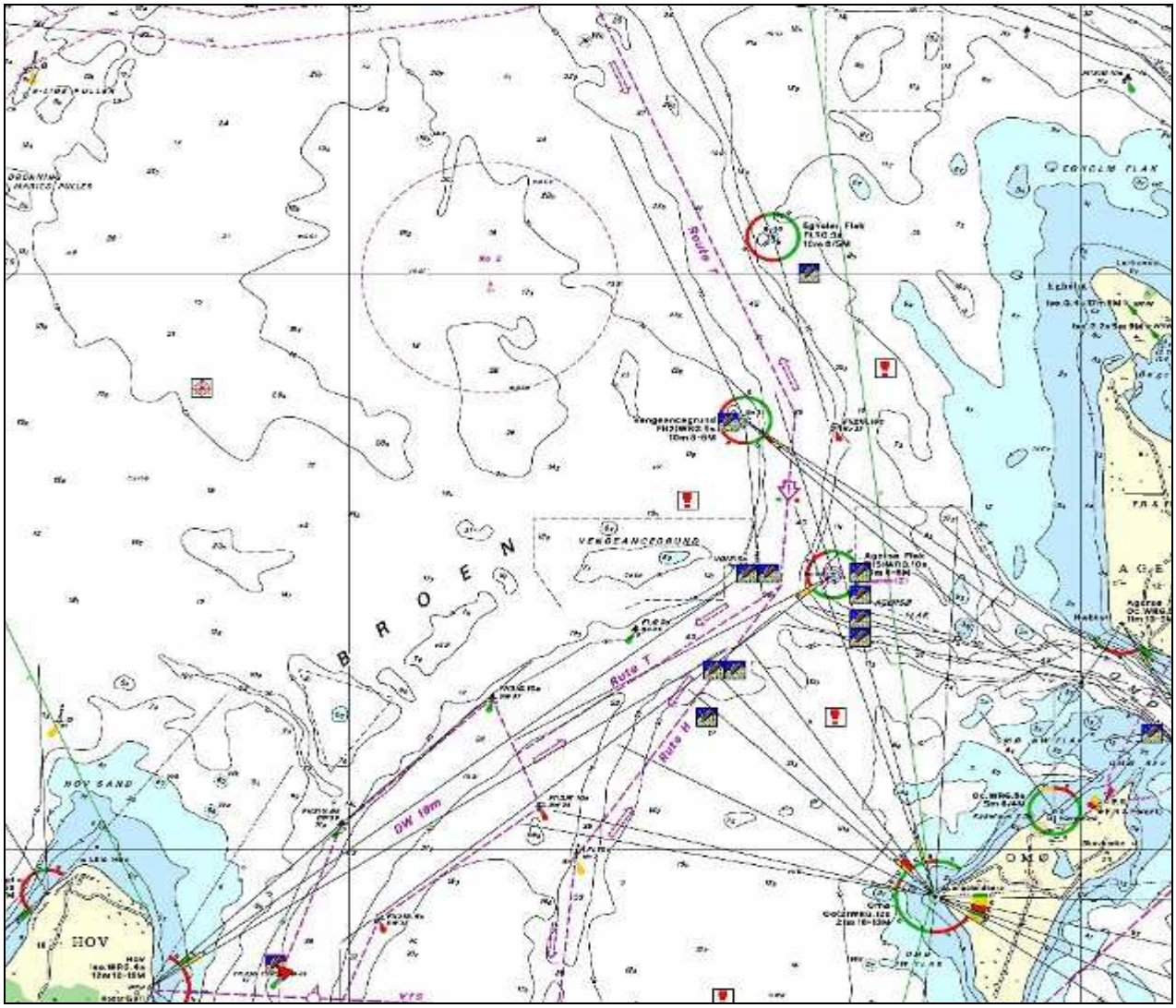

Figure 14: Groundings and collisions in the area VTS Great Belt, southern section of the map

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Grounding	1	2	-	-	2	1	4	2	-	-
Collision / other collision (crash)	-	-	1	-	-	-	1	2	-	1

The Great Belt: The VTS area					
	Ship´s name	**Type of accident**	**Flag**	**Date of accident**	**Type of ship**
2002	ZOGRAFIA	Grounding	Malta	June 25th	Bulk carrier
	VERA MARETSKAYA	Grounding	Russia	November 13th	Bulk carrier
2003	NORSEA	Grounding	Malta	May 12th	Oil tanker
2004	PETIMATA OT RMS	Grounding	Bulgaria	July 9th	Bulk carrier
	APOLLOGRACHT	Grounding	Holland	July 16th	General cargo multi-purpose ship
	BERGITTA	Collision	Norway	October 24th	Oil tanker
	MSC EYRA	Collision	Panama	October 24th	Container ship
	ALFONSO	Grounding	Cyprus	November 17th	Reefer
	MASTROGIORGIS	Grounding	Panama	December 9th	Bulk carrier
2005	SEA VENTURE II	Grounding	Cyprus	January 21st	General cargo multi-purpose ship
	ALEKSANDR NEVSKY	Collision	Russia	May 23rd	Bulk carrier
	MSC EYRA	Collision	Panama	May 23rd	Container ship
	ELEFTHERIA	Grounding	Panama	June 5th	Bulk carrier
	VERTIGO	Collision	Jamaica	December 7th	Bulk carrier
	ZIEMIA LODZKA	Collision	Liberia	December 7th	Bulk carrier
2007	ATHINOULA	Collision	Malta	June 27th	Bulk carrier

Where else do the accidents take place?

I figuren nedenfor, vises en fordeling af, hvor i farvandene omkring Danmark grundstødningerne og kollisionerne er sket. De ulykkesmarkeringer der ligger inde i land, er sket i en flod

The figure below shows the distribution off the places for groundings and collisions on the sea around Denmark. The accident markings situated on land are accidents on a river.

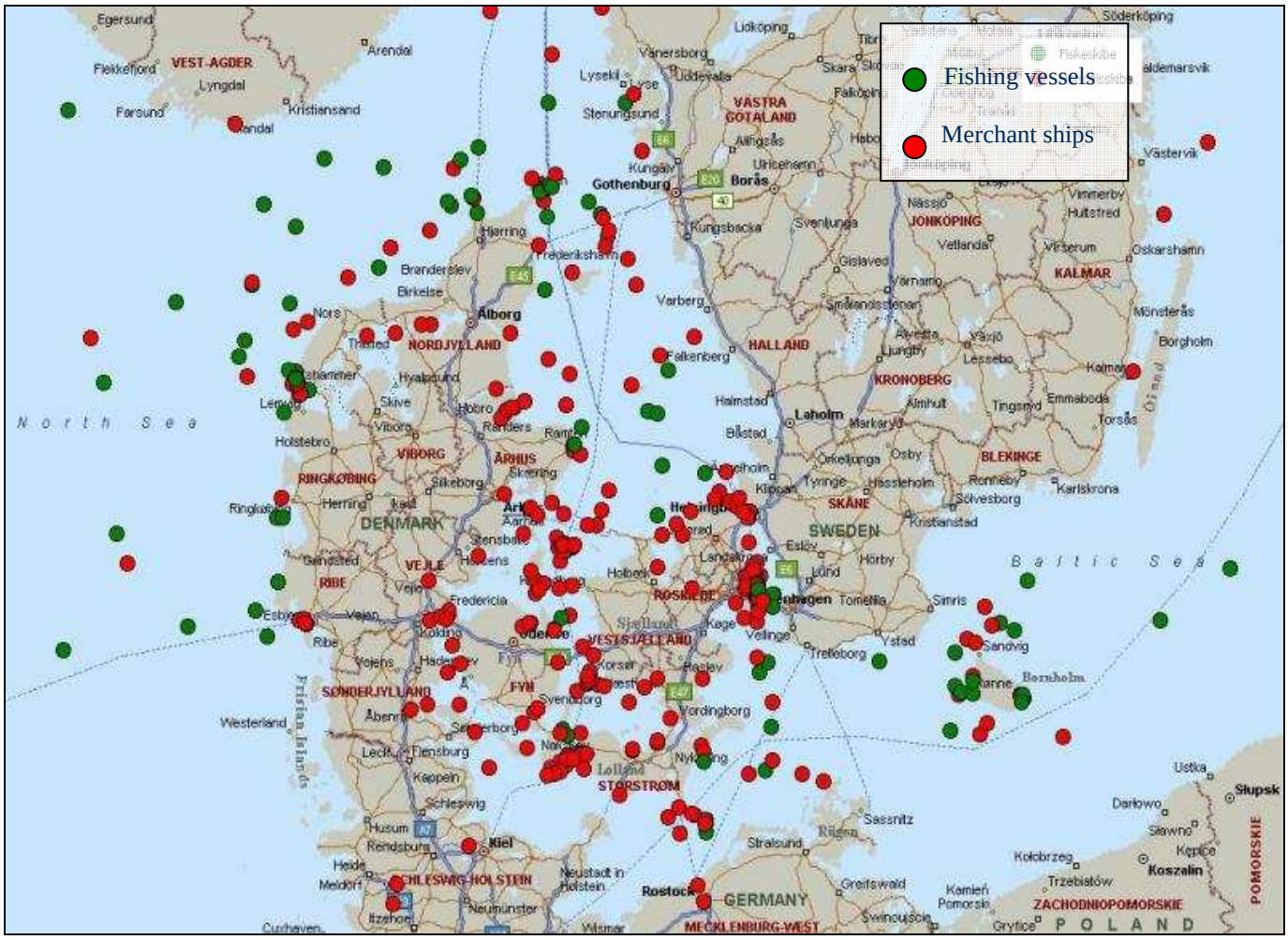

Figure 15: Groundings and collisions in the waters around Denmark in the period 1998 – 2007, all flags

Where do the accidents take place worldwide?

I figuren nedenfor, vises en fordeling af, hvor grundstødningerne og kollisionerne med danske skibe er sket rund om i verden. De ulykkesmarkeringer der ligger inde i land, er sket i en flod

The figure below shows the distribution of the places for groundings and collisions involving Danish ships, worldwide. The accident markings situated on land are accidents on a river.

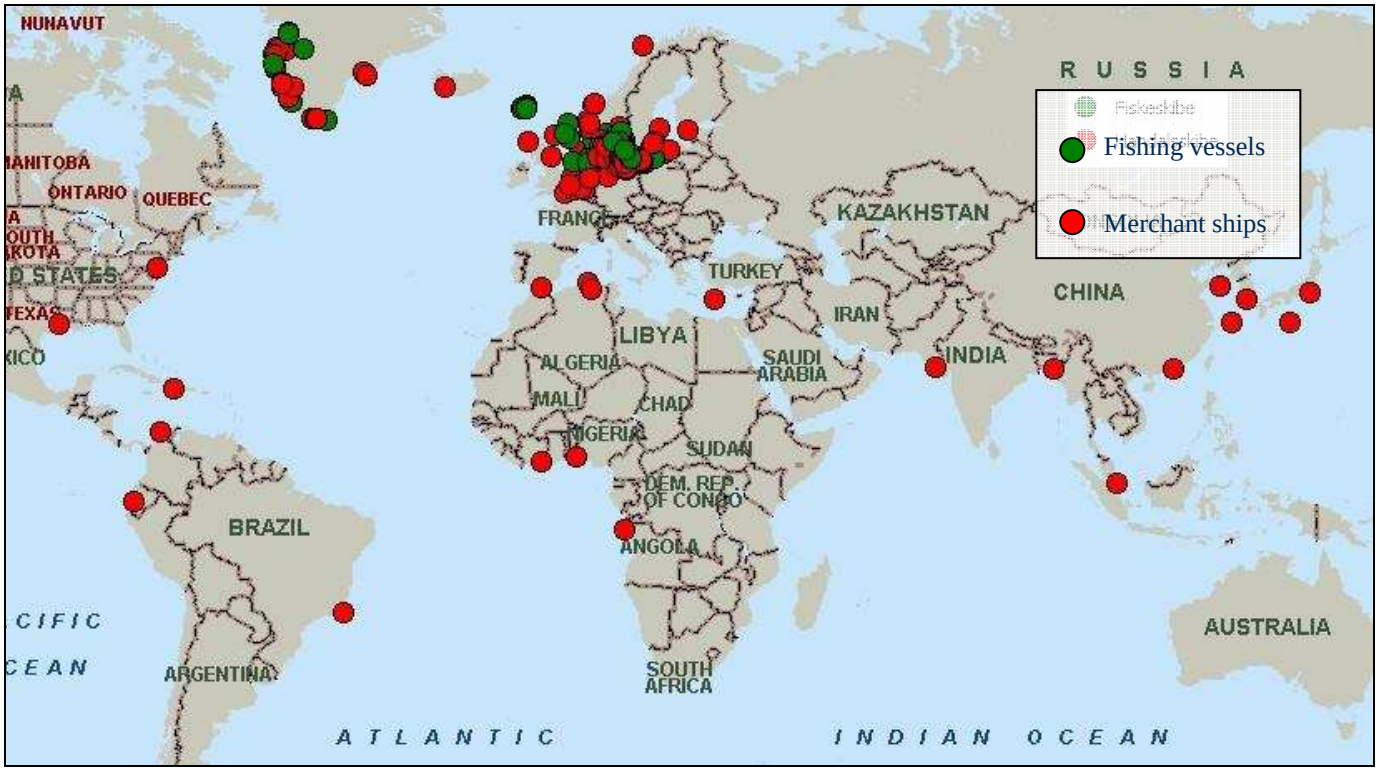

Figure 16: Groundings and collisions involving Danish ships in the period 1998 – 2007, worldwide

Frequency of groundings and collisions in the Great Belt and the Sound

The effect of the work with safety at sea is measured as the number of registered marine accidents (groundings, collisions and collisions/crashes) on merchant and passenger ships in the Great Belt and the Sound compared to the number of ships that pass the Great Belt Bridge (VTS The Great Belt) and the Sound Bridge (Drogden). Please note that the severity of a marine accident, ship types and the size of the ships is not taken into consideration here.

The Great Belt is defined as the sea area from and including Langelandsbæltet to and including Hatter Barn. The Sound is defined as the sea area from and including the line Falsterbo/Stevns to and including Svinbådan/Nakkehoved.

Table 49: Groundings and collisions in The Great Belt and the Sound

Groundings and collisions per 10 000 passages		2001	2002	2003	2004	2005	2006	2007
The Sound	Grounding	9	6	3	2	3	5	6
	Collision	3	1	3	2	2	1	1
The Great Belt	Grounding	2	3	5	8	7	1	2
	Collision	4	-	1	1	3	1	1
In total		**18**	**10**	**12**	**13**	**15**	**8**	**10**

Table 50: The number of ship passages in The Great Belt and the Sound

	2001	2002	2003	2004	2005	2006	2007
The Sound Bridge	37 806	37 648	38 902	39 466	35 745	36 187	35 433
The Great Belt Bridge	23 524	20 928	23 240	23 745	24 324	24 722	25 769
In total	**61 330**	**58 576**	**62 142**	**63 211**	**60 069**	**60 909**	**61 202**

Source: The Royal Danish Administration of Navigation and Hydrography

Table 51: Frequency of groundings and collisions per 10 000 passages in The Great Belt and the Sound

Groundings and collisions per 10 000 passages		2001	2002	2003	2004	2005	2006	2007
The Sound	Grounding	2.38	1.60	0,.77	0.51	0.84	1.38	1.69
	Collision	0.79	0.26	0.77	0.51	0.56	0.28	0.28
The Great Belt	Grounding	0.43	0.48	2.16	3.38	2.88	0.40	0.39
	Collision	1.70	-	0.43	0.42	1.23	0.40	0.39
In total		**2.93**	**1.71**	**1.93**	**2.06**	**2.50**	**1.31**	**1.63**

Annex 1 – Data sheet

Various statements are shown below that are not directly related to marine accidents. The statements are, however, included since they can add to the explanation of the observed development.

Merchant ships

Table 52: The development in all Danish registered merchant ships

	Dry cargo ships	Tankers	Passenger ships	Other merchant ships	In total
1998	1 480	91	260	314	2 145
1999	1 479	96	258	318	2 151
2000	1 479	96	255	335	2 165
2001	1 430	96	250	338	2 114
2002	1 429	101	250	351	2 131
2003	1 433	99	247	369	2 148
2004	1 482	83	247	406	2 218
2005	1 513	79	241	403	2 236
2006	1 498	73	251	387	2 209
2007	1 496	90	259	313	2 158

Table 53: Number of merchant ships in the registers end of year

	DIS		DAS/FTJ	
End of year	Number	Tonnage in 1 000	Number	Tonnage in 1 000
1998	520	5 211	..	..
1999	530	5 322	..	..
2000	574	6 220	..	..
2001	528	6 582	..	..
2002	510	7 048	1 499	206
2003	502	7 334	1 532	198
2004	483	7 438	1 610	199
2005	489	7 926	1 588	179
2006	494	8 667	1 566	168
2007	486	9 079	1 580	168

The Danish Maritime Authority does not have comparable numbers for the number in DAS/FTJ from before 2002.

I nedenstående tabeller, vises registrerede fiskeskibe ifølge opgørelser fra Fiskeridirektoratet. Hvor det er muligt, er opgørelserne delt op på bierhverv og erhverv.

The table below shows the registered fishing vessels according to the counts of the Directorate of Fisheries. When possible, the counts are divided upon sideline and commercial occupation.

Table 54: The number of fishing vessels end of year 2007 according to the Directorate of Fisheries

	Danish registration			Greenlandic[1)] registration
Size GT	**Commercial**	**Sideline**	**In total**	**In total**
< 5	1 174	724	1 898	439
5 – 20	541	31	572	259
In total < 20	1 715	755	2 470	698
20 – 500	471	0	471	75
> 500	22	0	22	24
In total > 20	493	0	493	99
In total	**2 208**	**755**	**2 963**	**797**

1) According to count in the Danish Maritime Authority´s registers.

Table 55: The number of fishing vessels in Denmark 1998-2007 according to the Directorate of Fisheries

Per December 31st	Tonnage	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Sideline	0 - 4.9 BT	836	819	853	843	852	831	795	742	729	724
	5 BT and upwards	65	51	47	48	47	41	34	31	30	31
	Total	901	870	900	892	899	872	829	773	759	755
Commercial	0 - 4.9 BT	1 828	1 731	1 623	1 546	1 466	1 356	1 303	1 248	1 214	1 174
	5 BT and upwards	1 643	1 619	1 618	1 581	1 450	1 341	1 275	1 245	1 163	1 034
	Total	3 471	3 350	3 241	3 127	2 916	2 697	2 578	2 493	2 377	2 208
Total		**4 372**	**4 220**	**4 141**	**4 019**	**3 815**	**3 569**	**3 407**	**3 266**	**3 136**	**2 963**

Table 56: Distribution of age of the fishing vessels end of year 2007 according to the Directorate of Fisheries

Average	Tonnage	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Sideline and Commercial	0 - 4.9 BT	22	23	24	24	25	25	26	26	27	27
	5 BT and upwards	32	32	33	33	33	32	32	33	33	33

Number of seafarers and fishermen

The statistics show how many seafarers, who, on a given date, where signed on Danish ships, and so does not include seafarers, who were not on a ship because of vacation, leave, illness, etc., but who are still employed in the operation of a ship. The statistics are therefore not actual employment statistics, but are used as input to for instance the Danish Ship Owner's Association's estimate of how many persons are occupied in the shipping business.

Table 57: Number of people signed on ship duty by nationality in DIS and DAS as from September 30th

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU+EØS	**6 017**	**5 536**	**5 985**	**5 514**	**5 760**	**5 411**	**6 131**	**6 155**	**6 736**	**6 766**
Officer	2 939	2 883	2 971	2 874	2 933	2 863	2 865	2 913	3 222	3 773
Other seamen	3 078	2 653	3 014	2 640	2 827	2 548	3 266	3 242	3 514	2 993
Other nationalities	**2 276**	**2 485**	**2 598**	**2 703**	**2 461**	**2 632**	**2 029**	**2 288**	**2 779**	**3 124**
Officer	432	456	467	380	332	399	342	421	515	660
Other seamen	1 844	2 029	2 131	2 323	2 129	2 233	1 687	1 867	2 264	2 464
In total	**8 293**	**8 021**	**8 583**	**8 217**	**8 221**	**8 043**	**8 160**	**8 443**	**9 515**	**9 890**
Officer	3 371	3 339	3 438	3 254	3 265	3 262	3 207	3 334	3 737	4 433
Other seamen	4 922	4 682	5 145	4 963	4 956	4 781	4 953	5 109	5 778	5 457

Table 58: Distribution of Danes and foreigners signed on ship duty in DIS and DAS as of September 30th

Percent	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Officer										
Danes	86 %	85 %	86 %	87 %	89 %	87 %	85 %	83 %	81 %	78 %
Foreigners	14 %	15 %	14 %	13 %	11 %	13 %	15 %	17 %	19 %	22 %
Other seamen										
Danes	58 %	54 %	54 %	50 %	53 %	50 %	48 %	47 %	46 %	44 %
Foreigners	42 %	46 %	46 %	50 %	47 %	50 %	52 %	53 %	54 %	56 %

Table 59: Compiled statistics for signed on in DIS as of September 30th of the year

	In total	Share of Danes	Share of foreigners
1998	5 836	58 %	42 %
1999	6 073	57 %	43 %
2000	6 960	59 %	41 %
2001	6 838	57 %	43 %
2002	6 712	60 %	40 %
2003	6 737	58 %	42 %
2004	6 929	56 %	44 %
2005	7 173	54 %	46 %
2006	8 162	52 %	48 %
2007	8 513	49 %	51 %

Table 60: Fishermen in Denmark, The Danish Directory of Fisheries´ statement

End of year	2001	2002	2003	2004	2005	2006	2007
Commer-cial	5 331	4 939	4 540	4 277	4 079	3 728	3 215
Sideline	896	901	876	833	772	756	754
In total	6 226	5 840	5 416	5 110	4 851	4 484	3 969

Table 61: Numbers of crewmembers on the ships at a certain date

	2001	2002	2003	2004	2005	2006	2007
Fishing vessel (31/12)	6 226	5 840	5 416	5 110	4 851	4 484	3 969
Cargo ships under 3000 GT (30/9)	2 461	2 369	2 282	2 069	2 119	2 449	2 895
Cargo ships over 3000 GT (30/9)	3 207	3 211	3 282	3 604	3 864	4 601	5 085
Passenger ships (30/9)	2 546	2 649	2 471	2 512	2 474	2 556	2 275

The numbers for the Fishing vessels are from the Directorate of Fisheries, while the numbers for cargo- and passenger ships are the numbers of people signed on ship duty reported to the Danish Maritime Authority

Annex 2 – Terms and definitions

Term	Definition
Aweigh	That the ship is not: anchored, moored to land, on land.
Capsizing	Marine accident where the ship has placed itself on the side and subsequently foundered.
Coaster	A General cargo multi-purpose ship with a tonnage below 3,000. “Coaster” is not a generally accepted technical definition, and the exact definition is therefore arguable. The Authority will therefore avoid making use of this term.
Collision	Marine accident in which two ships or vessels, that are both aweigh, have collided. Collisions between two ships are in the statistics registered as two marine accidents, except in the chapter ”Groundings and collisions in the Danish waters” on page 48.
Conditions outside the ship	Marine accidents where the crew has had no direct influence on the circumstances leading to the accident, or where the accident cannot be credited to technical defect or structural fault.
Contact damage	Marine accident where the ship has crashed into a pier, bridge, light, ferry berth or similar.
Dry cargo vessel	A ship that is used as: Bulk carrier, Container ship, Refrigerator ship, Cargo ship, RO-RO ship or Cement tanker.
Fishing vessels	Ships that are accepted into the register of fishing vessels and thereby provided with a port number. The division of the ships into commercial vessels and vessels with fishing as a sideline is in accordance with the Danish Directorate of Fisheries´ Register.
Less serious marine accident	Accident that is not a serious accident and in which the ship is not lost.
List	Accident where shifting of the cargo or other has canted the ship permanently, yet without sinking.
Loss	A ship that has been exposed to an accident of such seriousness, that the ship has hereafter been deleted from the ship register.
Marine accident	Incident where the ship has been damaged. Marine casualties on barges are included under the towing ship.
Merchant ships	Ships that are not fishing vessels, not self-propelling barges or pleasure boats
Operational errors	Errors made by the crew in relation to the operation of the ship, in other words human mistakes. These “errors” can be caused by many factors, such as insufficient training, long working hours, stress, fatigue, etc.

ANNEX 2 – TERMS AND DEFINITIONS

Term	Definition
Other collision (crash)	Accident where a ship has crashed into another ship, which was anchored or moored to quay or buoy.
Passenger	Person on board a ship, who has no work function on the ship.
Reportable work related accident	Accident that has caused disablement for a day or more, not including the day of injury.
Serious marine accident	Marine accident that has caused so much damage to the ship that it must be categorized as not seaworthy or an accident that has resulted in serious injury to a person. (Definition before 2006: Marine accidents that have caused so much damage to the ship that it must be categorized as not seaworthy.)
Serious work related accident	Accident that has resulted in injuries in the form of fractured bones, compound fracture or loss of limb (amputation).
Structural faults	Accidents caused by faults in the building of the ship or faults in the design of its machinery or other equipment.
Tanker	A ship that is used as: Gas tanker, Chemical tanker, Oil tanker, Product/Oil/Chemical tanker, Product tank.
Technical defects	Accidents caused by defects or breakdown on the ship or the ship's machinery or other equipment, and which the crew has not immediately been able to foresee or prevent.
Tonnage	The tonnage that the Danish Maritime Authority has registered. For the purpose of this statement the Authority has compiled the conception of tonnage, so that gross tonnage is used if known, otherwise register tonnage is used.
Unexplained accident	Accident where it has not been possible to identify a cause.
Work related accident (occupational accident)	Incident in which a crew member on a ship has died or been injured, either in relation to a marine accident, in relation to the work on board or in relation to other activities, in spare time, etc. The work related accidents are registered under the year in which the accident took place.
Work related injury	An illness developed from prolonged influence of the work or from the conditions under which the work has taken place. Work related injuries are registered after the year when the report has been made to the National Board of Industrial Injuries.